TEACHER'S HANDBOOK

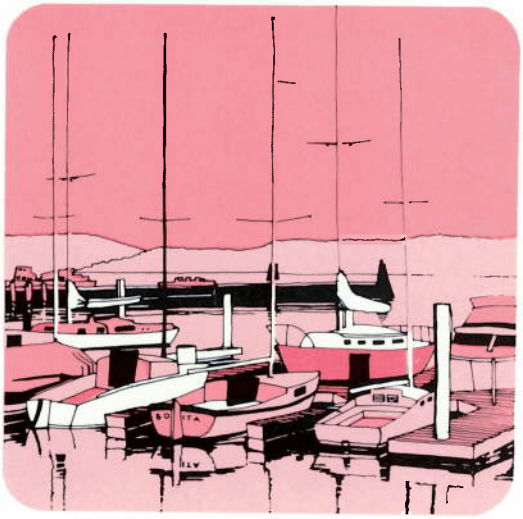
SRA

READING LABORATORY®

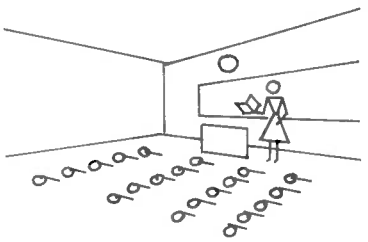
3b

revised edition 1988

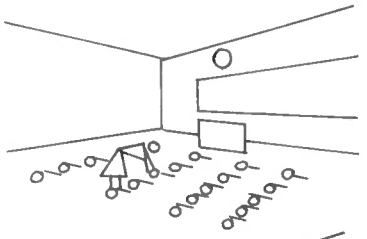
by Don H. Parker



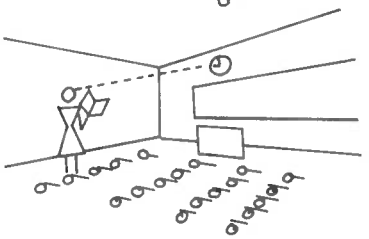
The Basic Procedures for Using the READING LABORATORIES®



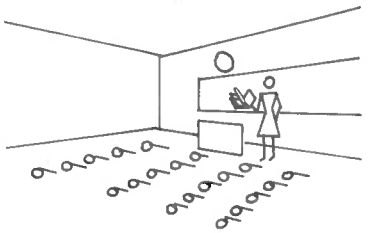
ACTIVITY	METHOD
1. Introducing the learning system of the laboratories	Class-as-a-group; teacher directed.



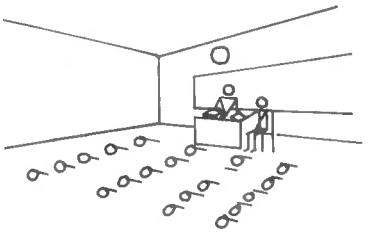
2. Introducing the Power Builders	Class-as-a-group; teacher directed.
3. Using the Power Builders	Individualized, self-programed. Teacher helps as needed.



4. Introducing the Rate Builders	Class-as-a-group; teacher directed.
5. Using the Rate Builders	Class-as-a-group; individualized self-programed; teacher directed.



6. Introducing and Using the Literature Selections	Individualized, self-programed; *or* teacher directed, class-as-a-group.



7. Introducing and Using the Listening Skill Builders	Class-as-a-group; teacher directed.
8. Evaluation of learning	Teacher-student conferences; help as needed, plus scheduled talks. Teacher as learning consultant.

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by Don H. Parker
Director
Institute for Multilevel
Learning International

SRA

1988 EDITION

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Acknowledgments

It is difficult to claim authorship of the SRA READING LABORATORIES. Actually, they were born in the classroom. The idea first took shape in 1950, amid the most humble circumstances, as a result of the author's having been faced with a nearly impossible teaching problem to which there were no ready-made answers. Completely new methods and materials had to be devised. Their success in a special situation encouraged their tryout in regular classrooms.

By 1957, when the first lab appeared in published form, well over three hundred teachers, supervisors, and administrators, as well as thousands of students in classes from grade 1 through college, had actively participated in the work of developing these multilevel materials devoted to individualizing reading instruction in the regular classroom. Since publication, hundreds of other educators have given freely of their time to make constructive comments and criticisms. Subsequent editions and printings have reflected their ideas. It is hoped that voluntary feedback from the actual point of use will likewise make for the continual refinement of the present edition.

To Dr. Ruth Strang, professor of education, Teachers College, Columbia University, goes the author's deepest gratitude for encouraging him to pursue the multilevel philosophy and technique with all possible resources during the years of basic research.

To Nita Garvin, project director of the 1988 edition of the *SRA Reading Laboratory IIIb*, and to the editors of SRA, goes the author's sincere appreciation. To share their professional skills and exacting workmanship was a delight. Their understanding of the multilevel philosophy was reflected in their work both as members of a team and as creative individuals.

With the students—the thousands who have been my best teachers and colleagues—I gladly share any credit for the development of the SRA READING LABORATORIES that may be mine.

DON H. PARKER
August 1987

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INTRODUCTION

If you have used an SRA READING LABORATORY before, you are familiar with the ease and success with which this learning system operates in the classroom. If you have not, you probably have examined the components you saw when you first opened the box, particularly the colorful array of Power Builders and Rate Builders. These components are the bases of the multilevel reading programs offered by *SRA Reading Laboratory IIIb.*

This handbook will be your guide for instituting and directing the laboratory reading program. It also contains the materials and directions needed for the listening program.

Perhaps you are already acquainted with the SQ3R* (Survey, Question, Read, Review, Recite) technique of approaching new materials. If so, you have probably already "surveyed" this handbook. If SQ3R is new to you, try it now on this handbook as an effective means of becoming acquainted with it.

1. **Survey.** Thumb through the handbook slowly, noting the headings, the general content, and the sequence of ideas. During this process you will find yourself automatically taking the next step.

2. **Question.** Begin by asking questions of the author. Associate what you see with *what you already know.* Now, using what you already know to build a framework for the elements of the program that are new to you, you are ready for the third step.

* *"Steps in the SQ3R Method," pp. 32, 33 in EFFECTIVE STUDY, Fourth Edition by Francis P. Robinson. Copyright 1941, 1946, by Harper & Row, Publishers, Inc. Copyright © 1961, 1970 by Francis P. Robinson. Reprinted by permission of Harper & Row, Publishers, Inc.*

3. **Read.** Read the handbook quickly to see what it tells you as a whole. Do not pay too much attention to details. Details will be far more meaningful when you have the whole picture. This third step may take an hour or so. You are now ready to review.

4. **Review.** Skim lightly over the handbook again. Now you take the last step.

5. **Recite.** Organize new knowledge for specific purposes. Your purpose in reading this handbook is to bring the greatest possible help to your students and to get the most help possible for yourself. Become familiar with laboratory techniques, so that you can present them effectively to your classes. Teachers who are using the multilevel reading programs recommend that at the beginning one follow the well-established pattern described on the following pages.

As you surveyed, you probably noted the frequency with which certain words appeared: Power Builders, Rate Builders, Listening Skill Builders, Listening-Notetaking Skill Builders. These are the materials used in the laboratory reading and listening programs. Power Builders offer reading selections and exercises designed to increase comprehension, develop vocabulary skills, and build word-study skills. The timed Rate Builders encourage rapid, intensive reading of shorter selections. The Listening Skill Builders make students aware of the techniques and skills involved in careful listening, and the Listening-Notetaking Skill Builders reinforce the listening skills while teaching students the techniques of notetaking.

Complicated? No. Because the program is largely student-administered, you will find yourself free to spend far more time than usual in counseling the individual student. Your job is to get the laboratory program started—to help each student start where he is and move ahead as *fast* and as *far* as his learning *rate* and *capacity* will let him. Throughout much of the laboratory program, students work independently, completing their work, checking and scoring their record pages, and charting their daily progress. You will have no papers to grade, no grades to enter, and no records to keep once the program is under way. You may discover, however, that the short stories and novella in the new literature section of the laboratory provide wonderful material for conducting traditional teacher-student lessons. Student copies of the stories may be ordered separately. The answers to questions and teacher prompts are located in the Guide to the Literature Strand.

You will want to read the first 41 pages of this handbook as a unit, as well as the first 10 pages of the Guide to the Literature Strand.

I. MATERIALS OF THE IIIb LAB

POWER BUILDERS AND POWER BUILDER KEY CARDS

The function of the Power Builders is threefold: (1) to broaden the scope and power of students' reading, (2) to develop vocabulary and word-study skills, and (3) to teach the reading-thinking skills necessary for increasing depth of comprehension and critical evaluation of what is read.

Each Power Builder consists of an illustrated reading selection and two sets of exercises. The selections cover a wide variety of subjects and have been adapted for placement within nine reading levels: 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, and 12.0. (See Fig. 1 for correspondence of color to reading level.)

The "How Well Did You Read?" comprehension check evaluates student understanding of the selection in three general areas: information gathering, inference making, and critical evaluation. The "Learn About Words" section helps students develop vocabulary and word-study skills. Exercises A and B give instruction in the use of context clues to determine meaning and in semantic variations—both based on vocabulary words in the selection; exercises C, D, and E systematically introduce and reinforce a broad area of phonic and structural word-study skills. Also included

are studies of synonyms, antonyms, homonyms, idioms, and figures of speech.

There are 99 different Power Builders, eleven in each of the nine reading levels. Each level is identified for classroom use by color; within a color level, each Power Builder is identified by a number. All selections within a level are of equivalent difficulty, so that the Power Builders at any given level may be read in any order.

Each student will complete a minimum of twenty-nine Power Builders, if the teacher follows the recommended schedule (see Appendix A). The number completed *within a given color level,* however, depends on each student's needs.

Each Power Builder has its own key card. Key cards correspond to Power Builders in both color and number. Students use key cards to check their work on Power Builders.

RATE BUILDERS AND RATE BUILDER KEY BOOKLETS

The function of the Rate Builders is to encourage rapid, intensive reading. Each Rate Builder consists of a short reading selection followed by a comprehension check. Students

READING LEVELS IN READING LABORATORY IIIb

Color	Grade Level
Rose	5.0
Red	5.5
Orange	6.0
Gold	7.0
Brown	8.0
Tan	9.0
Lime	10.0
Green	11.0
Purple	12.0

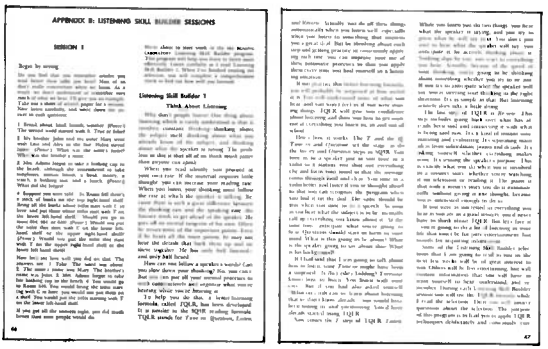
FIGURE 1

are allowed exactly three minutes to read the selection and write their responses to the comprehension check items. Three Rate Builders are usually administered as a set during a class period of Rate Builder work.

There are 144 different Rate Builders in the laboratory, sixteen in each of the nine reading levels. The reading levels and the identifying colors correspond to those of the Power Builders. A student begins his laboratory work in the same color level of both the Power Builders and the Rate Builders. He may, however, find that he is able to progress more quickly in one program than in the other.

Correct responses for all Rate Builders are given in the Rate Builder key booklet; forty copies of this booklet have been provided. A student uses the booklet to check his own work.

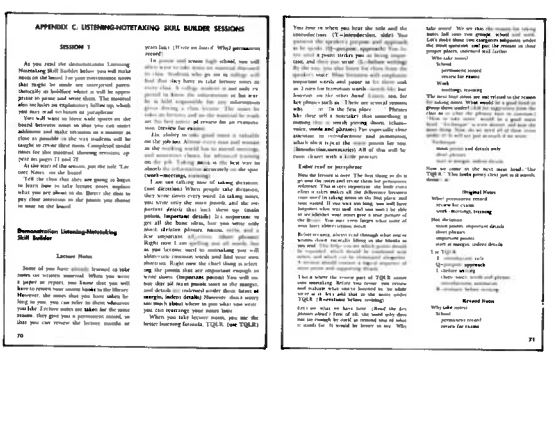
LISTENING SKILL BUILDERS



Listening Skill Builders, which begin on page 46, teach students to approach listening as a skill and to use information acquired by listening.

The teacher reads the ten Listening Skill Builder selections to the class. For each, students complete a Listening Skill Builder comprehension check in their Student Record Books. Correct responses for the "How Well Did You Listen?" comprehension checks are included in the Teacher's Handbook.

LISTENING-NOTETAKING SKILL BUILDERS



The eight Listening-Notetaking Skill Builders, which begin on page 72, reinforce previously developed listening skills and teach students some techniques of notetaking. The program includes one introductory session devoted to demonstration and practice of these techniques; in the other six sessions students practice them. Model notes are included in the Rate Builder key booklet.

STUDENT RECORD BOOKS

The Student Record Book serves as a valuable record of the student's daily work and progress. It has an even greater long-range value in that it can also serve as a part of the student's continuous cumulative progress record in his reading development through the grades.

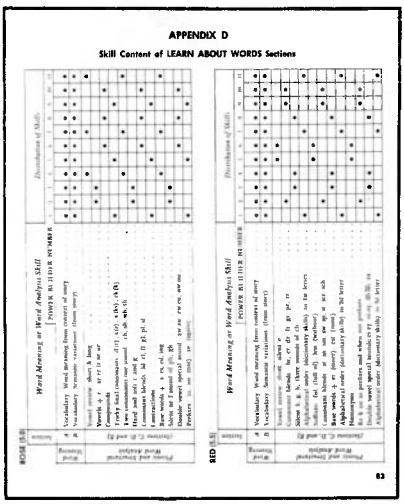
A record book is required for each student. It contains:

- Two charts on the front cover that indicate the Power and Rate Builders a student has completed and those on which he is currently working.
- A presentation of SQ3R, the read-study formula taught by the SRA READING LABORATORIES.
- A Power Builder Starter and two Power Builder Follow-ups, used to introduce and

review procedures for Power Builder work.

- Record pages for writing responses to all exercise materials in the lab.
- A Conversion Table for quickly converting the number of correct responses on each exercise to a percentage score.
- Progress charts on which students record their daily progress.

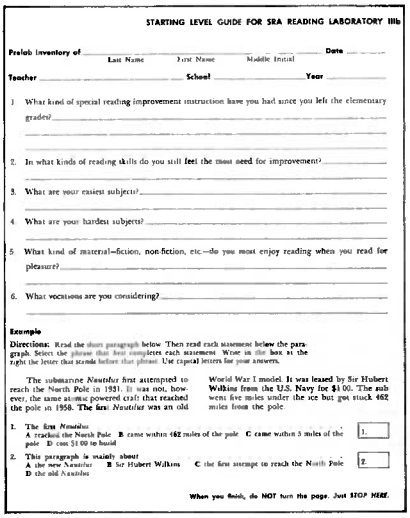
SKILL-CONTENT CHARTS


APPENDIX D

Skill Content of LEARN ABOUT WORDS Sections

Appendix D of this book contains nine skill content charts for the "Learn About Words" sections of Power Builders: there is one for each of the nine reading levels. These charts show the continuum of word-study skills taught in the C, D, and E exercises of each level and the distribution of the exercises within that level.

STARTING LEVEL GUIDE


STARTING LEVEL GUIDE FOR SRA READING LABORATORY IIIb

Prelab Inventory of _____ Date _____

Last Name First Name Middle Initial

Teacher _____ School _____ Year _____

1. What kind of special reading improvement instruction have you had since you left the elementary grades? _____

2. In what kinds of reading skills do you still feel the most need for improvement? _____

3. What are your easiest subjects? _____

4. What are your hardest subjects? _____

5. What kind of material—fiction, non-fiction, etc.—do you most enjoy reading when you read for pleasure? _____

6. What vocations are you considering? _____

Example

Directions: Read the short paragraph below. Then read each statement below the paragraph. Select the phrase that best completes each statement. Write in the box at the right the letter that stands before that phrase. Use capital letters for your answers.

The submarine *Nautilus* first attempted to reach the North Pole in 1931. It was not, however, the same atomic-powered craft that reached the pole in 1958. The first *Nautilus* was an old World War I model. It was leased by Sir Hubert Wilkins from the U.S. Navy for $1.00. The sub went five miles under the ice but got stuck 462 miles from the pole.

1. The first *Nautilus*
   A reached the North Pole B came within 462 miles of the pole C came within 5 miles of the pole D cost $1.00 to build — 1.

2. This paragraph is mainly about
   A the new *Nautilus* B Sir Hubert Wilkins C the first attempt to reach the North Pole D the old *Nautilus* — 2.

When you finish, do NOT turn the page. Just STOP HERE.

The Starting Level Guide is administered to each student at the start of the lab program, even though he may have previously worked with an SRA READING LABORATORY. It is used to determine the color level in which a student begins work with both Power Builders and Rate Builders.

Starting Level Guides are found in the center spread of the Student Record Books. The teacher removes them before distributing the record books to the students.

THE COLORED PENCILS

The colored pencils facilitate record keeping. Students mark their progress charts with the color of the level in which they are working, enabling teacher and student to note development at a glance.

II. TIME ALLOTMENTS

SRA READING LABORATORIES have proved most effective when scheduled over a continuous block of time; it is therefore advisable for teachers, especially those unfamiliar with the labs, to follow the recommended fifteen-week schedule provided in Appendix A. The suggested seven weeks of daily lab work provides for a logical introduction to and reinforcement of the reading and listening programs; the sessions during the following eight weeks sustain initial improvement and insure maximum retention of the skills presented and practiced in lab work.

You may wonder why it is not recommended that the program be spaced, say, once a week during the entire school year rather than concentrated as above. It is not recommended because the *principle of reinforcement,* firmly established by research in the psychology of learning, would not be given a chance to operate in a once-a-week schedule. With proper timing, there is a carry-over of one day's learning to reinforce the next. When practice periods are spaced too far apart, forgetting sets in and carry-over is diminished. During the earlier stages of a learning process, practice is most efficient when it is closely spaced.

The fifteen-week schedule is recommended as a basic program for all classes using *SRA Reading Laboratory IIIb.* If students have previously used SRA READING LABORATORIES, however, the lab program may be extended profitably throughout the year *after the first five weeks work has been completed.* It is recommended that the first five weeks of the program remain intact if students are to derive the greatest possible benefit from the total program, regardless of how much previous lab experience they have had.

At the start of a second-year program or beyond, you will want to use every feature of the Student Record Book, including the Starting Level Guide, to review and reinforce the various lab techniques as well as to place students at correct color levels.

Teachers have found it profitable to schedule the lab program as early as possible in the school year. Thus the increased reading efficiency built by the labs can be put to work in all school subjects for the greatest part of the school year.

III. STARTING THE PROGRAM

It is important for students to understand the "why" of working with multilevel materials. They must understand that, in working with SRA READING LABORATORY materials, they face competition only from themselves because each student starts at his present reading level and progresses as fast and as far as his learning rate and capacity will allow.

It is equally important for students to have a sure, sound knowledge of laboratory procedures. The teacher should therefore spend at least two days in establishing goals, administering the Starting Level Guide, discussing individual differences, and introducing the students to the Student Record Book and other components of the lab. Time spent in this introductory phase will make the laboratory program more rewarding for both students and teachers in the ensuing weeks and months.

Specific directions for introducing particu-

lar phases of the lab program follow. Some of the materials are presented in the manner in which a teacher might address his class. The approaches here given—and in many cases even the wording of them—have proved their worth many times. They are, however, only suggestions, and the teacher may modify the presentation to meet the needs of his personality and the needs of his class.

SESSION 1: MONDAY

Suggested time allotment:

Goal setting 20
Using the Starting Level Guide 25

Preparation: Read the Starting Level Guide. Then remove the guide from the center spread of each Student Record Book. (Grasp both pages of the guide and pull gently, so that the staples in the book will not be loosened.)

Follow-up: Score Starting Level Guide. Mark starting color level on each student's record book. (See inside back cover.)

Goal Setting

Most students have been found to be well aware of the need for improving their reading and study skills. Time spent in establishing both short- and long-range goals will help students get the most out of their SRA READING LABORATORY experiences. One of the best ways to begin to set goals is to ask questions such as these: "Is reading more or less important now than when your parents were in school?" "Do any of you feel the need to improve your reading and study skills?" "What specific difficulties trouble you most in reading?" A list of these trouble spots written on the chalkboard does much to create an "all in the same boat" atmosphere. Weaker students will be surprised and comforted to hear better students report that they have reading difficulties too. Such a discussion aids in setting up group goals and in stimulating the ordinarily less ambitious. The instructor can profitably follow up this discussion by reading the following to the class.

I Wish I Had Time To Read

To many of you, having time to read does not seem possible. Your school day is full of musts as you pass from class to class. After-school time finds you in a sports program, dancing class, at the dentist's, or doing your chores around home. The evenings are taken up with homework, music practice, and perhaps a weekend baby-sitting job.

Have you ever noticed, though, how some busy adults seem to accomplish so much? They know that time is like a rubber band that can be stretched and stretched or simply fall apart from disuse. Rather than wait for an hour or two that they could devote to reading, many have learned to read in snatches. These snatched minutes soon add up to that hour they have been looking for.

Other people feel they cannot read unless the environment is conducive; they must have special lighting and absolute quiet. But is this really necessary? Rupert Hughes suggested that one can read almost anywhere except in the dark. He did read almost anywhere. He even used to read while shaving or walking down the street.

It is said that the greatest of modern physicians, Sir William Osler, read the last fifteen minutes each night before he went to sleep. No matter how busy or tiring his day, or how late the hour, he never neglected this fifteen minutes of reading. How many books do you think could be read in half a century by this fifteen-minute-a-day reading habit?

You do not have to be a great man or woman to enjoy reading in snatches. During the last war, a private in the U.S. Army had developed the habit of carrying a book everywhere. When the drill sergeant called out "Rest," the soldier took out his book for a snatch of reading. He always had a book, and whenever he had to wait for anybody or anything, he read. He was well read

and well informed. He made the most of his snatches of time.

What about you? Do you have times in your day that could be salvaged for these snatches of reading?

When you can read better and faster, you will enjoy reading even more—and you will seek out these snatches of time when you can bring out a favorite book or magazine and for a short while venture into a far country or even into outer space.

Today reading is more important than ever in order for us to keep up with our fast-moving world. Knowledge comes mainly through reading. With our rapidly growing technology, we have increased responsibility. We must be well informed and have as much knowledge as any group of world citizens if we are going to maintain our standing in the world community.

This means that students must be helped to develop more efficient reading skills. The work you are going to do in the SRA READING LABORATORY will help you develop the skills you need for greater reading efficiency and pleasure. The skills you learn in the laboratory will help you get the most out of your snatches of time whether you are reading for information or for pleasure.

After you have taken a short survey of your present reading abilities, each one of you will start wherever you are and move ahead as fast and far as you can in developing reading skills.

Using the Starting Level Guide

The purpose of the Starting Level Guide is to provide a rough measure of the student's ability to read the kinds of materials found in *SRA Reading Laboratory IIIb.*

It is important that you allow enough time for the example and Selections A and B to be administered during a single period; otherwise results may not be a true guide to the correct starting level of the student.

1. Pass out the Starting Level Guides. Say:

Be sure to keep page 1 face up on your desk. Do *not* open the booklet until I tell you to. Print your name and other information on the two top lines.

Now carefully read each question below. Take time to write a thoughtful answer to each of the six questions in the prelab inventory.

Six to eight minutes is generally enough.

2. When everyone has completed all the items, say:

Now look down at the bottom of the page for the word "Example." This example will help you to take two brief tests to see where you now are in reading ability. Read the directions silently as I read them aloud.

3. If there are no questions, say:

Ready . . . read.

Allow sufficient time for all students to read the short selection and complete comprehension checks No. 1 and No. 2.

4. When students have finished, say:

Stop. Everyone stop working. Now let's go over the two items.

Read comprehension check No. 1 and call on a student for the letter he put in the box and the words that go with it, as "**D**: cost one dollar to build." Before giving the correct response, **B**, see whether there are other responses among students. Lead students who made wrong responses to reread the paragraph in order to find their mistakes in reading or in thinking about what they have read. Proceed to No. 2, for which the correct response is **C**.

5. When students are familiar with dealing with this type of material, explain:

You are going to read two more selections, followed by similar items. These two will be a little longer. When I give you the signal—*not yet*—open your booklet and fold it so that *only* page 2 is face up on your desk, like this. (*Demonstrate opening and refolding.*) You will then be ready to work with Selection A; be sure you see the words "Selection A" at the top of the page; then read and complete each of the comprehension check items underneath it. You may

look back at the selection as often as you want to. Read as rapidly as you can and still understand what you read. When you get to the bottom of the page, stop. Be sure to mark all your responses with capital letters. Ready . . . open your booklets and fold them back. . . . Read.

Allot exactly three minutes each to Selections A and B. If you cannot obtain a watch with a sweep-second hand, time as accurately as possible by the classroom clock.

6. After three minutes, say:

Stop working!

Do not give the correct responses this time, but tell the class:

Some of you may have found Selection A too easy or too hard, but it is a part of the inventory of your present level of performance. Now we are going to do the second one, Selection B. When I give you the signal—*not yet*—turn your booklet over on your desk so that page 3 is face up like this. (*Demonstrate.*) You will then be ready to work with Selection B. It looks somewhat like the one you just did, but it is longer. Some of you may not finish reading the selection and completing all the comprehension check items, but, as before, try to do your best.

Ready . . . turn your booklet over, page 3 up . . . Read.

After three minutes, say:

Stop working. Pass your booklets in.

Scoring the Starting Level Guide

The Starting Level Guide tells you only where students should start. The Power Builders themselves are far more effective tests of reading ability. After the students have worked through two or three Power Builders, examine each student's progress chart. If comprehension and word-study scores are low, and the reading time and comprehension time are high, the student is working at too high a level. He should be moved to a lower level at once. Similarly, if the student is achieving well in a short time, he may be ready to move to a higher level. (NOTE: The Starting Level Guides should be saved for later use.)

Teachers may use either the key in Figure 2 or the one on the inside back cover to score the Starting Level Guides.

KEY FOR STARTING LEVEL GUIDE

Selection A:	1. B	2. A	3. C	4. B	5. D	
	6. C	7. C				
Selection B:	1. D	2. C	3. B	4. D	5. C	
	6. D	7. A	8. D	9. B		

FIGURE 2

The Placement Chart in Figure 3 will translate the student's score into his initial color level in *SRA Reading Laboratory IIIa, IIIb,* or *IVa.* When the starting color level has been determined, the teacher should circle the corresponding color on both charts on the cover of the Student Record Book. Once the student has started, however, he may work in one level in Power Builders and another level in Rate Builders.

SRA Reading Laboratory IIIb is designed principally for students in the middle secondary grades. Students above or below this range may meet with greater success in the IIIa or IVa lab. For many students from culturally deprived backgrounds, IIIa may be too difficult. For these, regardless of their grade, the first four levels of Power Builders and Rate Builders in the IIa lab would be more appropriate. These may be ordered separately. Often students lack the fundamental word-attack skills usually taught in grades 1–4. The Word Games that supplement the I series of labs will allow these students to learn the phonic and structural word-attack skills in a manner not offensive to them despite their ages. Students of superior and gifted reading achievement will enjoy the greater challenge provided by *SRA Reading Laboratory IVa.* The sophis-

PLACEMENT CHART

(Unshaded area indicates Reading Laboratory IIIb; shaded area indicates a level outside the scope of IIIb.)

If the student is in grade – – – and scores this number of "total rights" on the Starting Level Guide (A + B score)

	LAB	2	3	4	5	6	7	8	9	10	11	12+
	IIIa		Blue	Blue	Purple	Purple	Violet	Violet				
7	IIIb				Rose	Rose	Rose	Red	Red	Red	Orange	Orange
	IVa											
	IIIa		Blue	Blue	Purple	Purple	Violet	Rose				
8	IIIb				Rose	Rose	Red	Red	Orange	Orange	Gold	Gold
	IVa										Orange	Orange
	IIIa		Blue	Blue	Purple	Violet	Violet	Rose				
9	IIIb				Rose	Rose	Red	Red	Orange	Orange	Gold	Brown
	IVa										Orange	Olive
	IIIa		Blue	Purple	Violet	Rose						
10	IIIb				Rose	Red	Orange	Orange	Gold	Gold	Brown	Brown
	IVa										Olive	Olive
	IIIa	Blue	Purple	Violet	Rose	Rose						
11	IIIb				Rose	Red	Orange	Gold	Brown	Brown	Tan	Tan
	IVa										Olive	Blue
	IIIa	Blue	Purple	Violet	Rose							
12	IIIb				Red	Red	Orange	Gold	Brown	Tan	Tan	Lime
	IVa										Olive	Blue

FIGURE 3

ticated reading in this lab is designed for the typical college-bound secondary student.

SESSION 2: TUESDAY

Suggested time allotment:

Discussing individual differences and introducing *SRA Reading Laboratory IIIb* 10

Introducing the Student Record Book and SQ3R 15

Using SQ3R on the Power Builder Starter.. 20

Preparation: Apply SQ3R to the Student Record Book if you have not already done so. Read pages 1–7 of the Student Record Book carefully.

Discussing Individual Differences and Introducing the Laboratory

When the first SRA READING LABORATORY was published, teachers feared that students would feel insecure or out of place because they would be working on many different reading levels. "The age of adolescence is the age of conformity," teachers said, "and how will students feel if they are not all reading the same book?"

The not-too-obvious answer has turned out to be that even though students all had the same book, they were actually *not* conforming, because they were not all reading it successfully. In any class using a single book there are actually six to eight, or even ten, different levels at which the class members are performing. In a so-called homogeneous class—grouped by any criteria—there are usually at least four or five different reading levels, and reading training, if anything, *increases* the spread.

The real urge toward conformity among adolescents is *to succeed at the thing attempted* in company with their classmates. They accept differences in ability levels in running, jumping, dancing, and conversing as a matter of course. They will accept differences in reading ability in the same way, provided they can all look forward to an opportunity to grow, and provided they all have an opportunity *to succeed at their present level of ability.*

Materials are not yet available to permit this kind of procedure in regular school subjects. Because the laboratory does provide this opportunity, it is advisable to point out to students the naturalness of individual differences and the fact that nearly everyone can improve his present reading performance.

1. Questions such as the following can start a discussion of individual differences: "Are all football players equally good quarterbacks?" "Are all the students in this room equally good at baking a cake?"

Use examples from the areas of sports, hobbies, and careers that will illustrate the existence and desirability of individual differences. From this discussion students will learn that in order to improve, a person must start *where he is* and have systematic practice of the right kind. Further, he must succeed as he goes along; otherwise he will not feel like trying harder and making the effort to improve.

2. If this is true in physical activity, it is reasonable to expect the same thing to work in improving one's reading ability. You might tell the students:

> If you are to begin a program of improving your reading and study skills, you must first find out your present level of performance and, second, work with the kinds of materials you need to help build up the level of your performance as you go along. You have already taken a brief test to find your present level of performance. Now look at the materials you will use to increase your reading and study skill ability—*SRA Reading Laboratory IIIb.*

3. Select Power Builder folders, one of each level, and hold them up fanwise so that the range of colors can be seen. Say:

Each of these colors represents a different reading level. They range from elementary school levels through the highest high school reading level. (*Do not reveal the grade levels of the several colors to the students.*) You will start on the level best suited to your present ability. During the next several weeks you will move ahead in two ways: you will progress both horizontally and vertically.

Certain reading-thinking skills are taken up at each level of the Power Builders, as are certain vocabulary-building skills. Exercises for developing these skills are spaced at intervals throughout each color series of eleven Power Builders. Thus, in addition to growing vertically by moving from one color level to another, you also grow horizontally by moving through a color level. When you do a number of Power Builders at a color level, you are learning and reinforcing your learning of the several skills taught there.

4. Select Rate Builder cards, one of each level, and hold them up. Say:

Various concentration and comprehension skills are spaced throughout these Rate Builders. Depending on your needs, some of you will do only a few Rate Builders at each level while others may do almost all of them. Your readiness to move to the next level will depend on many things.

I will look over your progress charts with each of you individually from time to time. When it appears that you are doing consistently accurate, independent work, and that you have covered a sufficient number of Power Builders or Rate Builders to meet and master the range of skills you need, I will suggest that you move to the next color level.

You will find that your progress charts can reveal many useful things that can be used to direct your further efforts. When I talk with each of you individually, be ready to discuss your progress charts.

Introducing the Student Record Book and SQ3R

You will find it profitable to devote no less than fifteen minutes to an explanation of the Student Record Book, including the SQ3R method. This book is vital to the laboratory and its activities, and it helps the student in his understanding of the program. The SQ3R method not only is basic to the entire laboratory program, but is applicable to the student's academic subjects.

1. Before passing out the books, hold up a copy and say:

Here is your Student Record Book. Each of you will have your own copy. It will show you how to get the most from your laboratory work. In addition, it contains record pages on which you will do *all* of your writing in our laboratory sessions. You will never write or make marks on any of the materials from the lab box.

When you receive your book, leave it face up on your desk. Do not open it. You will see the reason for this direction before the class period is over.

2. Pass out the Student Record Books. Say:

Do *not* open your books yet.

Now pick up your book and thumb through it once or twice, like this. (*Demonstrate by flipping pages slowly between thumb and forefinger, hesitating here and there as you note points of interest.*) Now put the book down on your desk. What is this book all about? What did you see in the book?

Write the word *Survey* on the chalkboard.

Many of you may be surprised at the great deal that can be learned from this quick and simple procedure. You will learn later how valuable it is to survey reading material. Now, while you were surveying the Student Record Book, something else was happening. Have you any idea what it was?

3. Help students to become aware that questions were beginning to arise in their minds, and that they were beginning to associate *what they saw* in the book with *what they already knew*. Students may not express themselves exactly; they often say, "Well, I saw a chart, and a chart usually illustrates something." Or, "I saw the words 'Power Builders.' They must have something to do with build-

ing reading power." Or, "How can you build more power in reading?"

Write the word *Question* on the board under *Survey* and tell them:

> You have just completed the first two steps of the read-study formula we are going to use.

4. Write the words *Read, Review,* and *Recite* on the board under the word *Question.* Say:

> We are now ready for the third step: read. But before opening your book, print your name and the information asked for in the spaces on the front cover. Now open your book to the inside front cover. There you will see described the four basic tools of the laboratory—Power Builders, Rate Builders, Listening Skill Builders, and Listening-Notetaking Skill Builders. Now let's find out what each of these four parts can do for you. Read the page silently; then we will discuss it.

5. When students have finished reading, discuss each of the points listed. Then point out the record pages and progress charts. You are giving the students a first view of materials; you are not teaching their use.

6. Say:

> In examining the Student Record Books, you have been using a valuable read-study formula. It is a method used by the United States Air Force to train officers and men to read more efficiently. The Air Force calls the method PQRST. We call it SQ3R. We will take enough time for each of you to learn to use it well. You will use it each time you work with the Power Builders. Later you will learn to use it with your textbooks to help you grasp the meaning of a chapter or other assigned reading better and faster.

Using SQ3R on the Power Builder Starter

1. Have students open their record books to page 2. Say:

> Here are the five steps in the SQ3R process. Look at the *Survey.* Let's apply this step to the Power Builder Starter that follows. First, look at the picture. (*Ask a student to "read" the picture aloud—to share what he sees in it with the rest of his class.*) Second, look at the title. Now look at the first sentence. (*Ask one or more students to interpret the title and the sentence.*) Now turn to the last paragraph on page 5 and read it. (*Ask one or more of the students to tell what he thinks the selection will be about and what he expects to find in it.*) Go back to page 3 and glance through the selection. What words give you "clues" to this selection?

2. Have students read silently about each of the four other steps in the SQ3R formula. Allow time for all students to read the descriptions of *Question, Read, Review,* and *Recite;* then discuss briefly. Tell the students:

> Having surveyed and questioned this typical Power Builder, you are ready for the next logical step: reading. You have already built up a framework for understanding the selection. You have an idea of what it is all about. You also have a number of questions waiting for answers. When you read, you will read to find more of the framework—the main ideas—and to fill in the details. Read also to answer your questions. Today you will have time to read only the selection. We will not work on the exercises.
>
> Before you begin reading, we need to talk about an element in our work that we have not yet discussed. That is *time.* In your laboratory work you will have the opportunity to become a more efficient reader. Each time you read, you will keep track of your reading time. When you need less and less time to read with good comprehension, you know that you are becoming a more efficient reader. A daily progress chart, which we will make use of later, helps you keep track of your gains in efficiency.

3. Help your students to understand how reading time and comprehension time are to be recorded. (Comprehension time is the time needed to complete the "How Well Did You Read?" and "Learn About Words" sections.)

4. Say:

> Now read through the entire selection.

Allow approximately ten minutes for the reading of the selection in order to give every-

one a chance to complete it. At the close of this period, and of every period, *always* have the Student Record Books returned to the file box. Books are not taken out of the classroom.

SESSION 3: WEDNESDAY

Suggested time allotment:

Reviewing SQ3R 5
Rereading the Power Builder Starter 10
Answering the comprehension check called "How Well Did You Read?" 10
Discussing the "How Well Did You Read?" items 15

Preparation: Review main points of SQ3R covered in previous session. Work through the "How Well Did You Read?" comprehension check items on page 5 of the Student Record Book (key is on page 107).

1. Have Student Record Books passed out. Begin by saying:

> In our last session we applied the first three steps of the SQ3R method. Today we are going to use the last two—*Review* and *Recite*. In order to reinforce your learning of yesterday and to make today's work faster and more efficient, begin by again using the first two steps on the selection "The Fabulous Flying Gasbag." Then read the selection again. When you have finished, complete the "How Well Did You Read?" comprehension check items. In doing these, you will be mentally reviewing the knowledge you got from the selection in order to recite (to respond to the items correctly). You may need to skim through the selection, rereading or reviewing some parts of it. As you can see, this will call for a new kind of reading skill known as skimming. (*Briefly explain how material can be skimmed for key information. See page 22 in the Student Record Book.*)
>
> When you have finished reading the selection, write your response to each of the "How Well Did You Read?" items on page 7 in your record book. Remember, you are to make no marks whatever on the Power Builder itself; write only on the record page. Today we are not concerned with time. The timing of these items is normally included in comprehension time, but comprehension time is not figured on this starter because it extends over three days.
>
> Now go ahead with your SQ3R work on "The Fabulous Flying Gasbag."

2. Most of the class should complete the reading and items in twenty minutes, leaving approximately fifteen minutes for a brief discussion of at least some of the items. In the discussion:

a) Call attention to the boldface headings such as "When did it happen?" Stress the importance of reading each one carefully before attempting to complete the item or items below it. Each one of these boldface headings represents a kind of reading-thinking skill needed to develop effective comprehension.

b) Show that some of the choices may be almost or partly right, but that there is only one correct response when all the facets of the item have been thought through carefully. Ask students who have come up with other responses to defend their choices by references to the facts or ideas contained in the selection. This is an excellent procedure for helping the class to understand what is meant by the "reading-thinking process." You will no doubt think of other valuable discussion points here.

SESSION 4: THURSDAY

Suggested time allotment:

Reviewing SQ3R of the Power Builder Starter 5
Working the vocabulary and word-study exercises called "Learn About Words" 25
Discussing the "Learn About Words" exercises 10

Preparation: Review SQ3R. Work through the "Learn About Words" exercises on pages

5–6 of the Student Record Book. Note points you wish to discuss with the class.

The purpose of today's session is to help students become familiar with some of the exercises and procedures they will encounter in working with Power Builders.

1. Suggest to students that they take a two- to three-minute survey of the selection "The Fabulous Flying Gasbag." Then begin with the "Learn About Words" exercises. Caution them to read a set of directions two or even three times in order to get a clear understanding of what is wanted. Remind students again to write all responses on the record page—no marks are to be made on the Power Builder itself.

2. When most of the class have completed "Learn About Words," ask students to give their opinions as to what skills are being covered. Among the points to bring out are:

a) the use of context clues to get word meaning (Section A);
b) the use of context clues to give the finer shadings of a word's meaning (Section B);
c) the several meanings a single word may have (Section B);
d) the difference between a long-vowel sound and a short-vowel sound (Section C);
e) the acquiring of rules that help determine whether a syllable has a long-vowel or a short-vowel sound (Sections D, E, and F).

Have the students read page 9 of the Student Record Book, which explains the three-part construction of the "Learn About Words" sections.

SESSION 5: FRIDAY

Suggested time allotment:

Scoring work on Power Builder Starter..... 10
Using the Power Builder progress chart..... 15
Evaluating work on the Power Builder Starter 10
Discussing Power Builder procedures..... 10

Preparation: Read pages 8 and 108 and the inside back cover of the Student Record Book. It is advisable to draw a portion of the record page and the progress charts on the board, so that you can go over each step with the entire class. Since methods of scoring and charting are similar for the IIIa, IIIb, and IVa labs, students can be instructed as a class if more than one lab is being used.

Major points to be covered in this session are as follows:

1. Students are to circle each incorrect response on the record page in the Student Record Book and write the correct response near the item. When the student writes out the corrected word completely, he gets a clear visual image of the correct response.
2. Time spent in using the key and in charting results is *not* included in comprehension time.
3. After the students have checked their work and marked their mistakes, it is profitable to have a class discussion of any steps in the procedure that are not clear. It is usually found that many mistakes have been made because directions were not followed. Point out to students that every Power Builder provides practice in following printed directions and that they should read those directions slowly, often more than once, before recording any responses.
4. The first step in scoring and charting is to note the "possible rights" in the "How Well Did You Read?" section. This total is recorded on a line at the left side of the page. Below this number the student writes his number right for the "How Well Did You Read?" section. He then does the same for the "Learn About Words" section.
5. The Conversion Table is on the inside back cover; directions for its use are on the preceding page. The function of the table is to convert the number of right

responses into a percentage score that can be recorded on the progress charts.

6. The first of the Power Builder progress charts appears on page 99. Show the students where to enter the number of the selection and the date. For the Power Builder Starter they are to write "PBS." Explain that they are to make a dot on the vertical bar to show the percentage right they achieved on "How Well Did You Read?" They will draw a similar dot to show the percentage right for "Learn About Words." Bars can then be filled in.
7. Students place an X on the first vertical bar in the time section to show their reading time. Normally they would place a small O on the same bar to show their comprehension time.

GENERAL NOTES ABOUT GETTING STARTED

● For effective improvement, a student should have a goal. Immediate individual goals may include such things as reading faster or more effectively, or learning to use a larger vocabulary. Students may have indicated such goals in answering the prelab inventory in the Starting Level Guide booklet. Beyond these specific goals, students must see a reason for working to improve; it may be improvement for the sake of reading pleasure, or reading as a key to self-improvement and a higher standard of living, or reading for the development of the individual into an informed and respected citizen. Students who sense a reason for improving their skills will strive harder than those who work with the lab only in terms of progressing through as many color levels as possible as quickly as possible.

● Group leaders should be appointed early. Their duties are to distribute materials and to collect and return materials to the lab box at the close of the period. A group leader decides which materials to pass out to each student in his group by referring to the charts on the covers of the Student Record Books. The group leader places an appropriate card in each student's record book and delivers the books to the students in his group. On days when Rate Builders are used, the group leader passes out one key booklet to each student, along with the Rate Builder cards.

Each time a student receives a new Power Builder or Rate Builder, he blackens the space on the chart that corresponds to the number on the Power Builder or Rate Builder he receives. After each student completes his work on a given Power Builder, the student himself —not the group leader—goes to the box, finds the appropriate key card, and takes it to his desk where he checks his work. The student himself returns the key card to its proper place in the box. Colored pencils are also obtained by the student when he is ready to mark his chart.

● It is wise to take all the time needed to make sure that every student understands the mechanics of scoring and charting his progress. It is important to instill early the idea of *absolute accuracy* in dealing with all details of lab work. Mistakes in reading and thinking are admissible; mistakes in operating details are not.

It is important for every student to understand the value of self-correction. Marking his mistakes and entering the right response from the key is an integral part of learning to read better. One of your major functions in this laboratory situation is to encourage students to analyze and to learn from their mistakes. Your skill in directing this phase of the work will grow as your experience with the lab increases. To help students attain a healthy philosophy about growth in reading through the wise use of their mistakes, you will find page 8 in the Student Record Book useful.

IV. THE POWER BUILDERS

The Power Builders of *Reading Laboratory IIIb* have been carefully selected and attractively designed to interest the adolescent. Each Power Builder consists of a grade-leveled selection followed by a comprehension check called "How Well Did You Read?" and a section of vocabulary and word-study skill exercises called "Learn About Words."

Students begin work with multilevel Power Builders in a color level assigned on the basis of their Starting Level Guide scores (see page 17). During each Power Builder session, the student receives a Power Builder of the proper color level from his group leader, reads the selection, writes his responses to the comprehension check, and works the vocabulary and word-study skill exercises. When he has completed the entire Power Builder, he checks his work with the correspondingly numbered Power Builder key card, and posts his results to a Power Builder progress chart.

A Power Builder will occupy the majority of the class for the full period. Some students will of course finish more quickly than others. Those who do can be encouraged to enjoy a few minutes of free reading from a classroom library shelf. Students who at first find the class period too short to complete a Power Builder should be encouraged to increase their reading rate. These students may get their Power Builders back the next day, however, by asking for them specifically or by putting only an X in the square on the Power Builder chart on the cover of the Student Record Book. (Squares for Power Builders completed should be blacked in.)

Students are introduced to work with Power Builders and to the SQ3R read-study formula through the one-level Power Builder Starter printed in the Student Record Book. Two Power Builder Follow-ups, also one-level material, are included in the Student Record Book so that teachers may review and reinforce Power Builder procedures after independent work has begun.

SPECIFIC PROCEDURES—POWER BUILDERS

Presenting Multilevel Work with Power Builders

Preparation: Make sure that the Starting Level Guide has been scored and that the starting color level has been circled on the cover of each Student Record Book. Show group leaders how to select Power Builders for students in their groups.

Begin the class by saying:

> Today each of you will begin multilevel work in the Power Builders. In this work each of you will move ahead at your own learning rate. You will work exactly as you did with the Power Builder Starter. (*Hold up a Power Builder card.*) Remember that you will not write on these cards. You will do all of your writing in your Student Record Book.
>
> When you get your record book and the Power Builder, note its color and number printed in the upper left-hand corner. Then look for the circle I have drawn round the name of a color on the front cover of your record book. This color should be the same as that of the Power Builder you just received. With your pencil, make an X in the square that indicates the number of your Power Builder. When you complete the Power Builder, you will blacken the square. Your group leader will then be able to know which selections you have read and to give you a new one each day.
>
> It is not necessary for you to read the selections in any special order. You may read No. 11 today and No. 3 tomorrow, for example. Just make sure that the card you get is the right color and one that you have not read before.
>
> There are eleven Power Builders in each color level. Each one has a different story or article. You will probably not read all of the Power

Builders in any one color level. In a few days some of you will be ready to move up to the next level of difficulty. Then you will begin with a different color. You will want to remain in a given color level, however, long enough to have an introduction to and reinforcement of the several skills offered at that level. We will decide when you should move up on the basis of what your progress charts show.

You do not have to wait for anyone else to move ahead, nor will you be racing each other to see who can move ahead fastest. In your work you are always trying to beat *your own* record. Only you are responsible for your progress. Of course, I will be here to help you from time to time, but progress depends on you.

Before having students proceed, take a moment to review the high points of the SQ3R method. Point out that—

1. There is a definite place for the eyes to go in steps one through four in using the Power Builders. Hold up a card and demonstrate.
2. Real skill in surveying develops only by practice. *(Students will need to be reminded of the Survey and Question steps at the beginning of the first several sessions until the process becomes fixed as a habit.)*

The teacher may then say:

Now you may record your starting time and begin. If you have any trouble understanding directions in your work, read them over at least twice. If, after that, you still need help, hold up your hand and I will help you.

Using the Power Builder Follow-ups

The Power Builder Follow-ups in the Student Record Books are single-level materials similar to the Power Builder Starter. These follow-ups provide an opportunity to direct students in reviewing and reinforcing the skills and procedures necessary for independent work with Power Builders. Through these follow-ups, you literally "reteach the laboratory" to your students. You will probably not reach all students successfully, but during the subsequent multilevel work there will be time to give less capable students the individual help and counsel they need.

The procedures used for presenting the Power Builder Follow-ups are those used in presenting the Power Builder Starter. The steps of SQ3R should be reviewed, as well as the meaning of reading time, comprehension time, and the procedures to be followed in checking, scoring, and charting the Power Builders. Again, discussion of the comprehension check items and responses, and of the "Learn About Words" exercises, will prove valuable to the students.

The two follow-ups have been scheduled (see Appendix A) where they have been found to be most effective in an "average" class. You may use them more closely or more widely spaced, according to the needs of your class, but it is strongly recommended that Follow-up No. 1 be used as scheduled.

Presenting SQ3R for Use with Textbooks

Preparation: Read page 21 of the Student Record Book. Try the technique on textbook work, preferably with a textbook you are now using in your daily classroom work.

By now students have become familiar with the SQ3R process as it applies to their work with the Power Builders. They may have already transferred some of these skills to their textbook work. However, transfer of training in a skill from one situation to another has been shown by educational research to occur most effectively when the instructor *directs* its transfer.

SQ3R has proved to be too valuable a working tool to trust to transfer by chance. On page 21 of the Student Record Book the exact method of applying it to textbooks is laid out step by step.

A thorough reading of page 21 and a tryout on a textbook or two will prepare you for presenting the method to the class. Most instructors have found that a demonstration (performed by them) followed by a class tryout on a new chapter or section of an actual textbook is an effective way to help students fix the exact steps in their minds.

During a session of this kind a student might ask, "Do you mean that I should read *everything* by the SQ3R method—even poetry and fiction?" You might reply in this way:

> Poetry and fiction are works of art. They are to be read and enjoyed according to the individual reader's needs and likes. SQ3R is for study and textbook reading rather than for leisure reading. However, whenever you wish to extract the full meaning from a piece of written material of any kind, use SQ3R. If you are assigned a poem, play, or work of fiction for study, read it through first for enjoyment. Then go back over it, using SQ3R to study its message intensively.

GENERAL NOTES—POWER BUILDERS

- The first period of multilevel work may close before some of the students have completed their record pages or progress charts. Usually a few minutes at the beginning of the following day will be sufficient for completion. If a student is unable to keep up with daily procedure, he may be working at too high a level. If this is true, he will probably be satisfied to go to a lower level where he can experience success.

- No student should work on more than one Power Builder a day. If the student is completing all steps in thirty minutes and scoring 100 per cent consistently, he should probably advance to another color level. Regardless of how well ability levels are matched to Power Builders, you will want to suggest brief activities to fill gaps between completion of laboratory work and the end of the period.

- The end-of-the-period moments when some students have completed their Power Builders are "golden times" for the teacher. He can talk to three, four, or possibly more students each period, asking each student for his reaction to his own progress chart, congratulating him for a neat and workmanlike job of recording responses and keeping charts, counseling where needed, and watching for signs that a student is ready to advance to the next color.

- One of the things both you and the students will prize in a multilevel laboratory program is that you are free to help when needed. Often a few seconds help at the right moment is all a student wants. Most of the time he really prefers to work on his own. Instruction is individualized through the multilevel materials themselves, and you are freed to give the kind of individual attention that sets up a highly desirable counseling relationship with the student.

V. THE RATE BUILDERS

Rate Builders are short multilevel reading selections accompanied by comprehension checks. In Rate Builder work, students are encouraged to increase their reading speed while maintaining or improving their comprehension of materials read. Students are allowed exactly three minutes to complete a Rate Builder. The time, in working with Rate Builders, remains constant. The student's rate and power of comprehension vary with his ability. Students will extend both their rate and power as they successfully cope with longer and more difficult Rate Builders in moving from one color level to the next.

Students begin work with multilevel Rate Builders in a color level assigned on the basis of Starting Level Guide scores (see page 17). Students begin work with multilevel Power Builders and Rate Builders in the same color level; they may, however, advance more quickly in one program than in the other.

In working with the multilevel Rate Builders, students begin and stop as directed by the teacher. They then check and correct their own work with keys in the Rate Builder key booklet, and post their results to a Rate Builder progress chart.

Whenever possible, three Rate Builders should be scheduled as a set. The first Rate Builder of each session should be considered a practice exercise that gives the student an opportunity to adjust to reading under pressure. The second and third Rate Builders are more nearly a measure of the student's actual performance.

A student's progress in Rate Builder work depends on his improving his reading rate while maintaining his ability to comprehend what he has read. Some students will find it difficult at first to adjust to the strict three-minute time limit because it will force them to stretch their reading ability. They will soon find, however, that they can complete Rate Builders in the allotted time.

The Rate Builder and Power Builder programs are complementary: the skills learned in one reinforce the skills learned in the other.

SPECIFIC PROCEDURES—RATE BUILDERS

Teaching the Use of Rate Builders

Preparation: Place the Starting Level Guide booklets on a table so that group leaders can easily locate those for their groups. Each student should receive the guide he worked with originally.

Go over each comprehension check item in Selections A and B of the Starting Level Guide, thinking through the keyed responses and the reasons for them. This advance work will help you guide the students in correcting their own wrong responses.

Select a single Rate Builder card of the proper color and place it in the record book of each student along with a Rate Builder key booklet. Place the card between the back cover and the last page so that the numbered tab sticks out. In this way the card is in the hands of the student for use later during the period, yet he cannot read it in advance. (Group leaders will insert Rate Builder cards in Student Record Books in this same manner in the future.)

Begin the day's work by saying:

> Today we are going to begin work with Rate Builders. Because Selections A and B, which we did on the first day of our laboratory work, are much like Rate Builders, we are going to use them in a practice session now. They are being returned to you with your record book. You will note (*hold one up to illustrate*) that in the back of your record book a numbered tab is sticking up. This is the tab of an actual Rate Builder.

You will *not* write on the Rate Builder card, but rather in your record book. Please do not look at the Rate Builder card or remove it from the back of your book until I give you directions for using it.

Now turn to page 77 in your record book. This is a Rate Builder record page. You will write all your comprehension check responses for Rate Builders on this page and the ones that follow.

Direct students to write "A" and "B" in the spaces to be used for the number of the Rate Builder. Students are to copy their responses on both Selections A and B in the first two record columns, showing their own work and your corrections. Illustrate on the chalkboard the correct placement of letters by drawing the first two columns of the chart. Advise students to keep letters small and neat. Capital letters are easier to read and less confusing to correct. Explain to the students that whenever they make incorrect responses, or no responses, in Rate Builder work, they are to circle the incorrect letters or the blank spaces just as you have done in correcting their Starting Level Guide booklets. Later they will write the correct response outside this circle.

When all students have finished transferring their Starting Level Guide scores to the Rate Builder record page, they are to note the number of possible rights (seven for Selection A and nine for Selection B) on the line directly below the columns containing their responses to the selections. Then ask them to count *their* number right and note this number on the line beneath possible rights. Next, students should turn to the Conversion Table on the inside back cover of the Student Record Book and compute their percentage right by following the directions given on the page facing the table.

Students then turn to page 104 to the first Rate Builder progress chart and fill in name, date, and write "A" and "B" in the spaces. They post their percentage score for Selection A by marking a dot at the correct percentage point on the first vertical bar. They then do the same for Selection B. Have students fill in the vertical bar with their pencils.

Students have now finished charting their scores, but they have not yet finished their work with Selections A and B.

Ask students to reread Selections A and B and to correct any responses on which they now see their mistakes. Also have them fill in any items they failed to complete when they were first given the test. Fill-ins should be made outside of the circles indicating omissions. (This rereading is untimed, but should require no more than ten or twelve minutes for all the class to complete.)

Now, using Selection B, call on various students to read the letter of the phrase that *best* completes each comprehension check item. Encourage students who differ to give their own choices and to justify them from the selection; then give the correct response from your own copy.

Call special attention to item 2 in Selection B, in which **C** is the right response. Students will find many items of this kind on the Rate Builders. Advise them that they must read all of the possible responses before deciding which is the *one* best. Take time to explain item 9 in Selection B. Make sure that everyone understands what the term *implies* means. If a completion item appears in the selection verbatim or just slightly paraphrased, it is *stated*. Usually the correct response on this kind of item involves generalizing and reading between the lines. The students must also be warned to avoid generalizations that cannot be supported by the materials in the selection.

Administering the First Multilevel Rate Builder

Before beginning the multilevel work with Rate Builders, the teacher might say:

Now, *without* removing the Rate Builder from the back of your Student Record Book, blacken the appropriate square on the Rate Builder chart on the front cover. Now turn back to your Rate Builder record page. When I give you the signal—*not yet*—you will draw out the Rate Builder card from the back of your book, read the selection, and write your comprehension check responses on the record page just as you did for Selections A and B. Please make *no* marks on the Rate Builder cards, as others will use them in later Rate Builder sessions.

It is important that you read the *whole* selection *first*. Then do the comprehension items, one by one. Do *not* skip any items. While working on a comprehension check, you may look back at the selection as often as you like. You should think about and choose the one best response for *each* comprehension check item, even though you may not be sure of it. Be sure you read and consider each of the possible responses before writing your choice.

When you are ready, say:

Ready . . . remove your card. . . . Read.

Write on the chalkboard immediately, for your own use, the exact hour, minute, and second you said "Read" and add three minutes. Watch the clock carefully, from the same place in the room, and when the hand shows the passage of *exactly* three minutes, say:

Stop. Everyone stop working. Turn your Rate Builder card face down on your desk. If you did not finish answering all the comprehension check items, draw a double line on your record page under the last letter you put down. (*Illustrate on chalkboard.*)

Have students open their Rate Builder key booklets to the proper page for their color level and check their work. Students can use the Rate Builder card face up as a guide rule for reading the key while observing items on which they made mistakes. They are to circle incorrect response letters and write the correct letters outside the circle. When they have finished checking, they are to note the possible rights, count their number right, and convert their number score to a percentage score by using the Conversion Table. They show this score by marking a dot on the third vertical bar of the progress chart. A pencil line of the proper color should be run from the zero point to the dot representing percentage right.

Encourage students to think back over the comprehension check items; if they answered incorrectly, they should refer to the selection to find where they missed a word or read the wrong meaning into a phrase. This knowledge of results immediately after each Rate Builder performance is extremely important. It leads to immediate evaluation and to redirection of effort toward bettering the next performance. Each Rate Builder should be checked and charted before the student moves to the next one.

Teachers will proceed with subsequent Rate Builder work in a similar manner. When the first Rate Builder has been corrected, wrong responses re-examined, and scores charted, students exchange Rate Builders. Students hold up their cards so that they can easily see who is reading in the same color they have been using. Each then exchanges with the student nearest him. Again he places the Rate Builder in the back of his record book with number tab up and waits for the signal to start reading.

GENERAL NOTES—RATE BUILDERS

- Rate Builders will help students improve their total reading ability. For the most effective work with Rate Builders, students should be told that (1) Rate Builders are timed so that they may work at improving their reading rate, (2) they cannot work effectively on their reading rate if they do not begin and stop as directed by the teacher, (3) correcting and "thinking through" mistakes is an important part of the learning process, and (4) an increased reading rate without sustained or improved comprehension has little validity.

● To profit from mistakes, students must reconsider any wrong responses they have recorded. Comprehension check items with alternatives such as "all of the above," "none of the above," and "both A and B" must be considered carefully, for these are not always correct responses. Items preceded by "Implied but not stated" deserve even closer examination. In these one alternative is correct—that is, it is implied but not stated. One alternative is stated and true, one is stated falsely, and one is neither implied nor stated. The alternatives do not follow in any set pattern, but each item follows the general pattern.

● Students' scores on the first Rate Builder of a set may be lower than their scores on the other two. It takes some time during each session to readjust to the pressures involved in timed reading practice. Students' scores may also drop when they move to higher color levels. The scores should even out again as the students adjust to the slightly more difficult material of the advanced color level.

● When students exchange Rate Builders, they should not look at the selection to see whether they have read it before. The identification tag of the Rate Builder can be quickly checked against the Rate Builder chart on the cover of the Student Record Book. Squares for Rate Builders they have read will be blacked in.

● Teachers should be sure to circle the new color level on the Student Record Book each time the student advances. Group leaders must depend on the accuracy of this cover chart in selecting Rate Builders to be delivered to students in their groups.

VI. THE LISTENING SKILL BUILDERS

The ten Listening Skill Builders (Appendix B) are read aloud to the class. Each Listening Skill Builder consists of a short lecture—approximately five minutes in length—followed by a comprehension check called "How Well Did You Listen?"

Students listen as the teacher reads the selection. They then open their Student Record Books and complete the appropriate comprehension check. When the entire Listening Skill Builder has been completed, the teacher reads the correct responses, guiding students through class discussion as they correct and think through their mistakes. As in other laboratory work, students check their own work and post their results to the Listening Skill Builder progress chart.

Listening Skill Builders teach students to approach listening as a skill—to recall, evaluate, and organize knowledge gathered aurally. Students learn the techniques of active listening through a better-listening formula called TQLR (Tune-in, Question, Listen, Review). This formula leads students to better listening habits just as SQ3R leads them to effective reading habits.

SPECIFIC PROCEDURES—LISTENING SKILL BUILDERS

Presenting Listening Skill Builder 1

Preparation: Read over Listening Skill Builder 1 for meaning; then, at least once before the class session, read it aloud at your normal rate. Your classroom reading may be smoother if you mark the normal pauses with pencil. For example: "The more useful you think something is / the harder you listen to it."

Before passing out the Student Record Books, say:

> In today's world we depend upon listening as much as reading. Many directions are given to us orally and much information that we learn we get from listening. We communicate with other people more through speaking and listening than through writing.
>
> Investigations and studies show that there are definite listening skills just as there are reading skills. By thoughtful practice, you can improve these listening skills. Better listening skills in the classroom will help you learn more and make better grades.
>
> We will have ten sessions on listening during our lab work. In each session I will read a passage about four or five minutes long. When I have finished, you will open your Student Record Book and complete the listening comprehension check. We will then go over your responses to see how accurately you have listened.

Have group leaders distribute the Student Record Books, but instruct the class to keep them closed while you read the selection.

Turn now to page 46 and present Listening Skill Builder 1 to the class.

Specific procedures for directing the students in responding to the comprehension check and in scoring and charting their responses follow Listening Skill Builder 1, Appendix B.

Presenting Listening Skill Builders 2–10

Sessions for the nine remaining Listening Skill Builders are conducted in the same manner as the first. The comprehension check, in each case, follows the Listening Skill Builder in Appendix B.

GENERAL NOTES—LISTENING SKILL BUILDERS

- Listening Skill Builders are single-level materials presented to the class as a whole; consequently, some students will have more difficulty with them than others. The Listening Skill Builders increase gradually in length and complexity, so that continued participation does not assure successful adjustment by all students. In classes where this is true of many of the students, the teacher may find and present additional listening materials for further listening practice.

- Varied delivery of the Listening Skill Builders is essential to the success of the listening program. Teachers should provide voice *clues* to significant points. Some teachers may mark the copy with expression marks such as / (one-second pause, or half stop) and // (full pause). Underlining or arrows to indicate the main points may be helpful to the teacher.

- Students should not take notes during the Listening Skill Builder sessions. If the question arises, assure students that only main ideas are tested in the "How Well Did You Listen?" comprehension check. Remind them that the ability to listen well is a skill in itself; notetaking will follow when they have further developed their listening ability.

VII. THE LISTENING-NOTETAKING SKILL BUILDERS

The eight Listening-Notetaking Skill Builders (Appendix C) are presented to the class when work with Listening Skill Builders has been completed. These are designed to teach students the rudiments of notetaking while reinforcing the listening skills taught through the Listening Skill Builders.

For the first lecture, students take notes in their Record Books as the teacher presents the Listening-Notetaking Skill Builder, editing and revising their notes as directed after the lecture has been completed. They then word a summary and copy it in their Student Record Books. In subsequent lectures, students continue to take notes on the pages provided in their Student Record Books. They then evaluate their own work, comparing their notes with the model notes provided in the Rate Builder key booklet and amending them if they feel it necessary.

The purpose of the notetaking program is to teach students to take *functional* notes on *oral* materials. There is no progress chart for this program: teachers must evaluate each student's progress with respect to his ability.

SPECIFIC PROCEDURES—LISTENING-NOTETAKING SKILL BUILDERS

Developing a Lecture Style

Although you may be an excellent lecturer when giving talks you have prepared yourself or when making an extemporaneous commentary, the problem of turning relatively unfamiliar materials, prepared by someone else, into an expressive and communicative lecture is something else again. When you want to tell your class something, you use your own natural style for emphasizing points or directions you want to put across. You pause here, raise or lower your voice there, and use various other means for giving your words the special emphasis you want them to have. When the ideas you seek to communicate are your own, your techniques of expression are adequate because the words you use are *your* words; they have meaning for you, and you get this meaning across to your class. On the other hand, when you are reading the words of others, the natural thing is simply to read, trusting the listener to find meaning in the flow of words. To make his point, a lecturer needs to proceed more slowly than at the average rate of reading or talking. A reader probably does not expect his audience to take notes; a lecturer does. Whereas a good reader may read at a rate of 125 words a minute, a good lecturer is more likely to speak at a rate of 80 to 90 words a minute. The lecturer achieves this rate in three ways: First, he talks more slowly during most of the lecture than an average reader would. Secondly, he makes effective use of pauses; he often pauses deliberately to pave the way for an important point or to let a point sink in. Thirdly, a lecturer usually consults his notes from time to time.

You have of course read the suggestions for delivering the Listening Skill Builders. Where notetaking is involved, however, it is important to develop a slower rate of delivery and a style that allows emphasis of key points through pauses and voice inflections.

In order to use these lecture materials in a manner that will help students to take the best possible notes, first read the material over silently to get its meaning. (Reference to the model notes in the key booklet may help you focus more quickly on the main ideas.) Then go back over the selection, reading it aloud and putting in the expression marks suggested below.

Half stop /	=	Roughly, a one-second pause
Full stop //	=	A pause of 2 or 3 seconds, or even more
Italics for special emphasis		One word in italics: louder
		Two or more words in italics: louder and deliberate word-by-word reading
Examples of use:		They are *trained.* We repeat, // *they are trained.*

The first three lectures have been marked to indicate short pauses (half stops), longer pauses (full stops), and *italics* for special emphasis. They are offered to help you in practice-reading the selections aloud, lecture-fashion, before reading them as lectures to your class. Other lectures have been left unmarked so that you may mark them in the manner best suited to your own manner of speaking. You may even want to mark the parts in which you read directions aloud in this lecture style.

Delivering the Listening-Notetaking Skill Builders

There are two lecture passages in the first session. Have Student Record Books passed out but kept closed. Proceed as follows, saying:

> Today we will have the first of several sessions designed to help you improve your ability to take notes. These lectures are the kind you might hear in science, social studies, economics, or English classes.

Turn now to Appendix C, page 70, and present the demonstration lecture. Specific procedures for directing students as they edit and revise their first notes follow Listening-Notetaking Skill Builder 1.

The techniques for presenting the other Listening-Notetaking Skill Builders are the same as those for this session.

GENERAL NOTES—LISTENING-NOTETAKING SKILL BUILDERS

- The Listening-Notetaking Skill Builders are presented to the class as a whole. Because they grow progressively longer and harder, some slower students will find it difficult to take increasingly better notes. These students should concentrate on getting the main points down; they can develop the more advanced techniques of notetaking at a later date.

- The term *functional* is the key to student and teacher evaluation of student notes. Notes should contain both an informal outline of main and subordinate ideas and a summary statement or paragraph. Revised notes should constitute effective material for review at a later time.

- Students should be encouraged in individuality in notetaking as long as their notes remain functional. Common notetaking shortcuts should be introduced after the first four sessions: an arrow to indicate that one thing "led to" another; w/ for *with;* w/o for *without;* underlines, capital letters, marginal numbers, and other timesavers students will invent for their own use.

- The introductions to the Listening-Notetaking Skill Builders prepare students for "things to look for." These and "signaling" transitional phrases, such as "there are several reasons," "first of all," "on the other hand," will help students organize their notes.

- Students will need help at first in formulating summaries that are not simple restatements of fact. Class discussions following each Listening-Notetaking Skill Builder will lead to a better understanding of summaries.

VIII. EVALUATION

GRADES

Concerning the controversial question of grading, the author's advice, based on fourteen years of applying the multilevel technique to problems of guidance and curriculum improvement, is this: A student's laboratory work should probably be ungraded; the progress charts should tell the story.

If a pupil is reading successfully several levels below many students in the class, how can he be given a C or a D when his work is the best he can do? On the other hand, should he be given an A and thus be led to think of himself as an A student only to find, as he approaches the age when he considers enrolling in college, that he is not an A student after all, and that he does not have enough academic ability to meet college requirements? Would not a fairer grade be A for effort and D for potential achievement? Surely a pupil is entitled to realistic guidance throughout his school years.

The SRA READING LABORATORY may, in some schools, form the basis for a dual grading system—one grade for effort and another for a realistic ranking or comparison of functional ability. Such a system would allow a student to approach intelligently the problem of further education and the demands of the labor market.

A dual grading system would also be useful in the case of the superior student who does average work—a student who might rate a D for effort but an A for potential achievement. When such a student works in the lab, he finds it all but impossible not to show his ability. The problem then becomes one of convincing him that since he has demonstrated this actual ability to do academic work, he should now apply himself toward additional improvement, so that his grade will read A for effort as well as A for potential achievement.

INDIVIDUAL CONFERENCES

One outstanding advantage of the multilevel program in the classroom may well be the opportunity it provides the teacher for individual contact with his students. Because much of the routine record keeping is done by the students, the teacher is free to counsel each student. Conferences should range from informal help with directions, a difficult word, or a particular exercise to a more formal period of several minutes duration when the student comes to the teacher's desk for a discussion about his goals, his work, and his progress.

Four planned conferences are recommended —the number advisable varies from student to student. Students, however, should be encouraged to ask for a conference whenever they feel they are ready to advance to a new color level or whenever they find themselves discouraged by their lack of progress. A conference near the end of the lab program gives the teacher an opportunity to discuss the totality of lab work with the student and to determine the degree to which the lab has affected the student's work in other curricular areas. Such a conference is valuable in that it provides a final self-evaluation for the student while allowing the teacher to assess the value of lab work to a particular student.

The four conferences recommended, and the general content suggested for each, are as follows:

1. The first conference should be concerned with the student's adjustment to the lab: What is the student's attitude toward the independent work required of him? Has he

been correctly placed in the reading programs? Does he understand thoroughly the procedures of working with Power Builders and Rate Builders?

Some students may have been misplaced in the lab, particularly in Power Builders. Although there can be no set rule, it is generally felt that a student consistently achieving from 95 to 100 per cent in thirty to forty minutes in his last five to eight sessions should be moved to the next color level. If he is achieving less than 70 per cent within approximately forty minutes, he should move to the color level immediately below the one to which he was assigned. If a student is achieving between 70 and 85 per cent in a similar amount of time, he is correctly placed, but he should continue in his assigned level until he can achieve a score of 95 to 100 per cent consistently. Students may work at one color level in Power Builders and in a different level in Rate Builders. Some students may do only six or eight Power Builders or Rate Builders in a color level before moving up. Most will do more; some will do all.

2. The second conference should provide an opportunity for discussing the student's first evident progress as revealed by the progress charts. The student may need encouragement at this point, or he may need to be directed to Power Builders and exercises that will help him with specific weaknesses. (See Appendix D, Skill-Content Charts.)

3. The third conference should be scheduled soon after the Listening Skill Builders have been introduced. Because all students listen to the same material, some will be unable to cope with the increasing complexity of the Listening Skill Builders. They may need to be reminded that every subject studied offers opportunities for practicing TQLR, and encouraged to work for improvement and not for high scores in the listening program.

4. The fourth conference should follow the introductory sessions with Listening-Notetaking Skill Builders. The student's notes should be examined carefully, and suggestions should be offered that will help him improve in subsequent sessions. Help in distinguishing details from main ideas will be needed by some students. Students may also need direction in learning to write true and succinct summary statements at the bottom of their notes, rather than a rambling discourse of a part of the lecture.

RECORD PAGES

Occasional informal checks of students' record pages will encourage neatness and accuracy. During these informal checks the teacher should make sure that students are evaluating their work, for self-evaluation is the key to steady self-improvement. More thorough checks of record pages are advisable for those students who seem to be finishing too quickly or too slowly. Their color-level placement may have to be adjusted.

The record pages for the Listening-Notetaking Skill Builders will require thorough attention if the teacher is to spot the difficulties besetting a particular student. Teachers have found that less time is needed for this necessary evaluation if students use a different-colored pencil or ink in making additions to their notes after checking them against the model notes in the Rate Builder key booklet. Students should be encouraged to evaluate their record pages after each day's work.

PROGRESS CHARTS

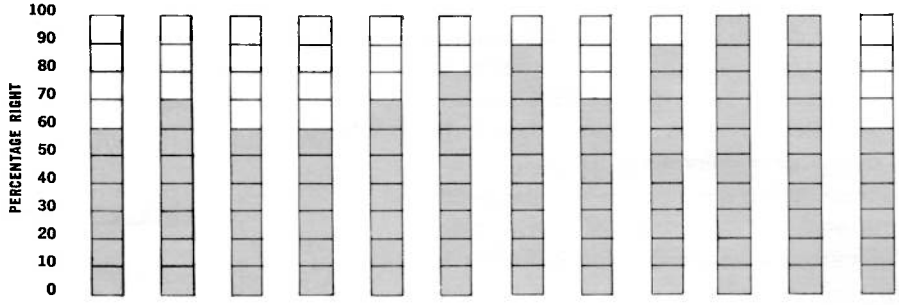
Because each student checks his own work in the lab and posts his results on charts as percentage scores, a quick glance at the charts (Power Builder, Rate Builder, and Listening Skill Builder) will reveal the progress he is making. Frequent informal checks of these charts, as the teacher moves around the room,

NAME Robert Jones

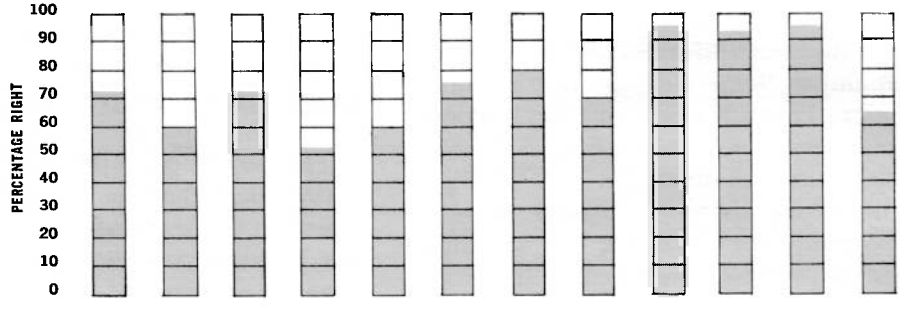
POWER BUILDER PROGRESS CHART

P.B. NUMBER	PB3	8	4	11	PBF1	3	7	PBF2	2	4	9	11
P.B. COLOR		ROSE	ROSE	ROSE		ROSE	ROSE		ROSE	ROSE	ROSE	RED
DATE	9/13	9/16	9/17	9/20	9/23	9/24	9/27	9/30	10/7	10/14	10/16	10/18

HOW WELL DID YOU READ?

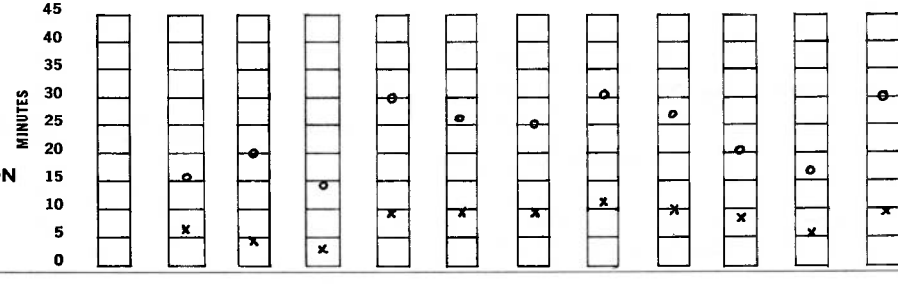


LEARN ABOUT WORDS



READING TIME (X)

COMPREHENSION TIME (O)



Interpretation of Student's Progress—Power Builders

These lines of progress may or may not be found in any single student. This chart is thus not meant to be a model; it is rather an example of a typical student. The one represented here might be a ninth-grader with no previous experience with the ING LABORATORY.

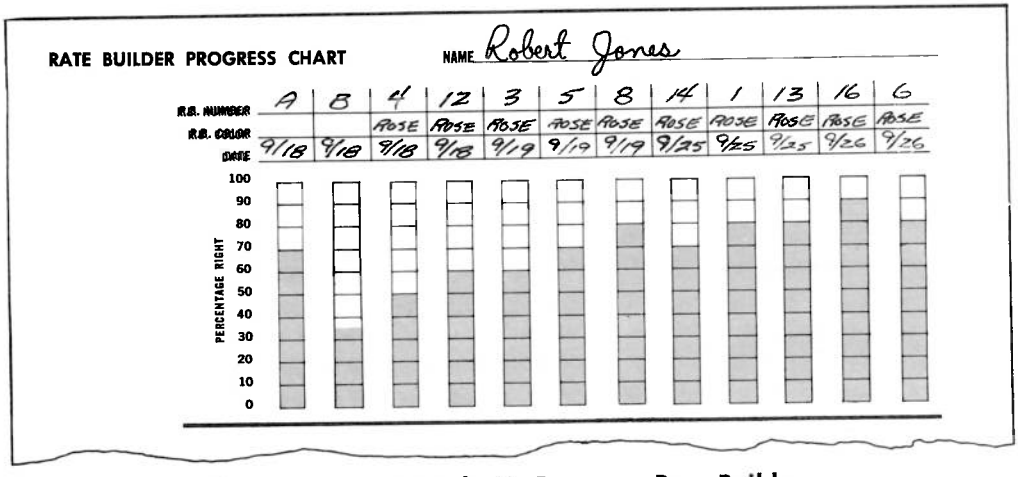
On September 13 Robert charts his scores on the Power Builder Starter.

Robert's first three scores on his individual work indicate that he is thinking of his work with Power Builders as a kind of speed test; his time curve is showing an increased rate of reading. He is requiring less and less time to complete a selection of the same length and difficulty, but he does this at the expense of comprehension of what he reads. His percentage score on both "How Well Did You Read?" and "Learn About Words" is a clear indication that he is reading too fast. His performance is well below the acceptable 90 to 100 per cent comprehension for independent work. Seeing this definite trend in the chart, the teacher has a brief conference at the student's desk, asking him how he feels about his work so far. After studying his chart, Robert suggests, "Too much speed." The teacher agrees.

In the Power Builder Follow-up session on September 23, Robert practices working more slowly. In the next two Power Builder sessions, Robert takes more time and works closer to his true capacity. He has become convinced that it pays to strive for a balance between the time spent in reading and the time spent in doing the comprehension checks. He gains additional practice in Power Builder Follow-up 2. From his consistently high scores on the next three Power Builders, both Robert and his teacher agree that he is ready to try the next color level.

On October 18 the new, more difficult level brings the student's comprehension scores down while his time line rises. This is to be expected at the start of the new color level. But gradually Robert will build up a trend of solid achievement. In future sessions he will prove to himself and to the teacher that he is ready to cope with a still higher level of reading-thinking and vocabulary-building skills.

FIGURE 4



Interpretation of Student's Progress—Rate Builders

As in the previous illustration of Power Builder progression, the Rate Builder chart pattern at the top of the page may or may not be an actual picture of any single student; it is typical, however, of what may be found in the average classroom.

Robert's scores on the Starting Level Guide Selections A and B show that he is not accustomed to working under pressure.

From his scores it can be seen that even after ten Rate Builders at the same color level, he is not ready to move to the next color level. However, there is every indication that in another session or two (having done four or six more Rate Builders) he will have sufficiently increased his comprehension at this color level to qualify him for an opportunity to move to a higher level of reading difficulty.

The student and the teacher come to see that merely reading fast—reading at a certain number of words per minute—is a most inadequate measure of reading skill. Keeping reading time constant (exactly three minutes for each Rate Builder) and gradually increasing the length and difficulty of the material leads the student to a higher rate of comprehension. This is the key to building concentration power and genuine reading efficiency.

NOTE: Because of the great variation in individual needs from student to student, the teacher's judgment—which will improve as he becomes more experienced in work with the laboratory—is the only sound basis for determining when a student is ready to move to the next level. As can be seen in comparing the performance of the same hypothetical student on the two types of work, a student may move ahead more quickly in Power Builders than in Rate Builders. On the other hand, the exact opposite is entirely possible. In other cases, students progress somewhat evenly in both.

FIGURE 5

will keep him aware of individual progress and insure that students understand and follow the correct procedures in marking them. A more thorough analysis of the charts, particularly with reference to the record pages, will enable the teacher to counsel each individual successfully.

Sample progress charts, representative of many seen in classrooms, are presented in Figures 4 and 5. Interpretations of the scores are presented following each figure.

MOVING THROUGH THE COLOR LEVELS

No hard and fast rules can be established for advancing students.* The progress of each student must be considered individually. Some students—those who have been relatively unsuccessful in academic work—may be hesitant to move to the next color level; others may want to move ahead before they have shown proficiency at their present color level. For the insecure student, the teacher may point out that success at one level indicates probable success at the next level. For those who want to forge ahead before success is assured, the teacher may emphasize the importance of horizontal development—the necessity for developing proficiency in skills already introduced before moving on to new ones.

Advancement should in any case be dependent on mutual agreement that the student is ready to attempt the next level; the decision to advance should be based on his progress charts and his record pages, and on the teacher's knowledge of him.

There is a wide range in the number of Power Builders or Rate Builders a student needs to read within a color level. At least four Power Builders are required to expose the student to the skills presented within a color level (see Skill-Content Charts, Appendix D), but a student will more commonly complete between six and ten.

*See page 35 for a rough approximation of readiness.

GROUP DISCUSSIONS

Group discussions are occasionally useful. Students enjoy the independent work provided by the lab, but they may become discouraged if their rate of progress does not match their expectations. The fact that each student competes only with himself and not with other members of the class may need to be re-emphasized. The fact that mistakes can be steppingstones to learning is also a useful concept to re-emphasize in order to relieve any possible guilt feelings. Time can be well spent raising and discussing problems common to several members of the class.

In addition to such informal discussions, the teacher should plan a midprogram class conference—a "where we are" conference to review the goals originally established, to strengthen the students' sense of purpose, and to encourage those who feel they are not progressing as rapidly as they should.

A final class discussion of lab work is also recommended, so that students can see the results of multilevel work and be encouraged to use their acquired skills in other classes throughout the year. A final class discussion will give the teacher a student's view of the lab and make his follow-up work easier and more effective.

POINTS FOR INFORMAL CLASS DISCUSSION

The Colors of the Multilevel Materials

The colors in *SRA Reading Laboratory IIIb* represent different levels of reading competence, but it is neither necessary nor desirable

to inform students what colors correspond to what grade levels (Figure 1 is included for the teacher's benefit in evaluating the class). Some students will persist in asking about the meaning of the colors. They may be told that the range of colors represents a range of skills and reading levels needed by a proficient high school reader. A student reading in the purple level of IIIb lab would be reading as well as the average college freshman.

Feelings of Inferiority

Students who worry because they are working in an obviously easier color level than others may be reminded of the discussion of individual differences. As long as the student improves his reading performance, he is succeeding in terms of the lab program.

Jaggedness of Progress Chart

The unevenness of their progress may disturb some youngsters, but they can be reassured by learning to place the emphasis on the general trends revealed. If this concern seems general, students can be encouraged to discuss the trends revealed by their progress charts—they will discover that many of their classmates' charts reveal similar patterns.

Frustration over Mistakes

Frustration over mistakes is an ever present worry among students. Actually, this frustration can be effectively utilized in the lab program to promote learning. Students should not "count" errors: they should go back to the selection or to the directions for the exercise and think through the mistake. Students should be led to develop the attitude that mistakes lead to learning.

Rate of Improvement

One of the most common of student worries about lab work concerns the rate of improvement. This worry can be alleviated by having the students assess their progress in terms of where they were at the beginning of the program, and how the reading-thinking, vocabulary, and rate skills have affected their work in various school subjects. Perhaps they did not realize that they actually were improving. Remind them that whenever they work diligently at lab work they are improving—they are learning and practicing skills that will make them more efficient readers.

Cheating

It is true that students may falsely record their scores, or better their scores on lab work by not correcting their work carefully, but such cheating is destroying the validity of the work they themselves are doing, not that of the other students.

The student who cheats may be doing so out of insecurity or laziness. If he is truly having difficulty, he should be moved back to an easier level where he can meet success without cheating, or otherwise helped to overcome his skill deficiencies. Even slow learners tend not to cheat when their efforts meet with success.

Complete de-emphasis on competition with others in lab work, plus the confidence that students attain from working at their own skill level, tends to eliminate the need for cheating. If it persists, a confidential talk may serve to point out the futility of cheating against oneself, and to establish the idea of the challenge offered to the individual by lab work. With others, an honor system approach might be in order.

Spot checking for errors, and praise for accuracy and neatness in scoring, calculating,

and charting, will tend to set up an atmosphere that discourages cheating. The underlying theory and practice of the laboratory method operate to remove the *need* for cheating. If the student is working at the right level, he can succeed without cheating.

Overconcern with Competition

Some students will worry because they do not seem to be progressing as fast as others in their class. Explain to these students that bettering their own record is their present goal—that individuals differ in reading aptitude as they do in other things. *Each* student can show improvement in *his own* performance, up to the level that his present stage of growth permits. Next year, perhaps, he will have the capacity to grow even more. His concern should be with the competition that he himself provides, not with the scores of other students.

IX. THE LITERATURE STRAND

OVERVIEW

The new component of the *Reading Laboratory IIIb,* the Literature Strand, has been included to promote the reading of classic literature, an appreciation of fine writing, and a realization of the important role reading plays in a person's life. Another important goal of the program is to inspire students to write creatively.

The Literature Strand is comprised of twenty-four stories ranging in length from eight to fifty-six pages and a novella of eighty pages. Each is a separate booklet containing attractive illustrations and an accompanying lesson that includes comprehension/discussion questions, writing assignments, and suggestions for related activities. The questions are primarily inferential and are designed to further the student's understanding of the story and of its meaning for him or her. The ideas for the writing assignments spring from the story itself: students are asked to write a story-length piece that will in some way relate to the story—in theme, in plot, in character, in setting, and so on. The activities suggest, among other things, research exercises and additional reading of works by the same author or on the same topic.

USES OF THE STRAND

The Literature Strand may be used as an adjunct to the *Reading Laboratory IIIb,* a supplementary program—or as either a basic world-literature textbook or a supplement to the literature text in use. Very few, if any, of the stories in the Literature Strand appear in junior or senior high-school anthologies. The teacher can feel confident that students will find the stories new and exciting. Specific information on the use of the Literature Strand to teach literary analysis and creative writing may be found in the Guide to the Literature Strand (located in the literature section of the laboratory).

LITERATURE
STRAND
SRA
READING
LABORATORY
3b
LITERATURE STRAND
by Don H. Parker
Multilevel Learning Laboratories®

HARRISON
BERGERON
KURT VONNEGUT, JR.
Jail

THE
DEAD
MAN
HORACIO
OQUIROGA

The Face
on the Laundry Room Floor

ADVENTURES OF A
HAVERSACK
HEINRICH BÖLL

ECHO FROM
ITHACA

APPENDIX A: DAY-BY-DAY SCHEDULE

(Based on the recommended 15-week period)

FIRST WEEK	**Monday**	Setting goals and administering Starting Level Guide. See page 14.
	Tuesday	Discussing individual differences; introducing Student Record Book; presenting SQ3R and Power Builder Starter. See page 18.
	Wednesday	Rereading Power Builder Starter; completing "How Well Did You Read?" comprehension check items. See page 21.
	Thursday	Completing Power Builder Starter; doing "Learn About Words" exercises. See page 21.
	Friday	Checking work on Power Builder Starter; recording scores on progress charts; evaluating work on Power Builder Starter. See page 22.
SECOND WEEK	**Monday**	Beginning multilevel work with Power Builders. See page 24.
	Tuesday	Power Builder session.
	Wednesday	Introducing Rate Builders. Rate Builder session (1 or 2). See page 27.
	Thursday	Multilevel work with Rate Builders (2 or 3).
	Friday	Introduce Literature Program. See page 41 and the Guide to the Literature Strand.
THIRD WEEK	**Monday**	Power Builder Follow-up 1. See page 25.
	Tuesday	Building more SQ3R power. See page 10 of the Student Record Book. Power Builder (1).
	Wednesday	Rate Builder session.
	Thursday	Using SQ3R with textbooks. See page 25. Rate Builders (2).
	Friday	Power Builder session.

FOURTH WEEK	**Monday**	Power Builder Follow-up 2. See page 25.
	Tuesday	Rate Builder session (2). Introducing Listening Skill Builders. See page 30.
	Wednesday	Listening Skill Builder 2. Rate Builder session (2).
	Thursday	Listening Skill Builder 3. Rate Builder session (2).
	Friday	Listening Skill Builder 4. Rate Builder session (2).
FIFTH WEEK	**Monday**	Power Builder session.
	Tuesday	Listening Skill Builder 5. Rate Builder session (2).
	Wednesday	Listening Skill Builder 6. Rate Builder session (2).
	Thursday	Listening Skill Builder 7. Rate Builder session (2).
	Friday	Listening Skill Builder 8. Rate Builder session (2).
SIXTH WEEK	**Monday**	Power Builder session.
	Tuesday	Listening Skill Builder 9. Rate Builder session (2).
	Wednesday	Power Builder session.
	Thursday	Listening Skill Builder 10. Rate Builder session (2).
	Friday	Power Builder session.
SEVENTH WEEK	**Monday**	Introducing Listening-Notetaking Skill Builders. Listening-Notetaking Skill Builder 1. See page 33.
	Tuesday	Listening-Notetaking Skill Builder 2.
	Wednesday	Listening-Notetaking Skill Builders 3 and 4.
	Thursday	Listening-Notetaking Skill Builder 5.
	Friday	Listening-Notetaking Skill Builder 6.

EIGHTH WEEK	**Monday**	Power Builder session.
	Wednesday	Listening-Notetaking Skill Builder 7.
	Friday	Listening-Notetaking Skill Builder 8.
NINTH WEEK	**Monday**	Power Builder session.
	Wednesday	Rate Builder session.
	Friday	Power Builder session.
TENTH WEEK	**Monday**	Power Builder session.
	Wednesday	Rate Builder session.
	Friday	Power Builder session.
ELEVENTH WEEK	**Tuesday**	Power Builder session.
	Thursday	Power Builder session.
TWELFTH WEEK	**Tuesday**	Rate Builder session.
	Thursday	Power Builder session.
THIRTEENTH WEEK	**Tuesday**	Power Builder session.
	Thursday	Power Builder session.
FOURTEENTH WEEK	**Tuesday**	Rate Builder session.
	Thursday	Power Builder session.
FIFTEENTH WEEK	**Tuesday**	Power Builder session.
	Thursday	Final evaluation.
Year-end refresher:	Nine sessions, to be scheduled by teacher, preferably three sessions a week for three weeks—six sessions of Power Builders and three sessions of Listening Skill Builders with Rate Builders.	

Summary: The foregoing schedule is based on sixty-two class periods (including year-end refresher). It allots:

- 28 days for Power Builders
- 6 days for Rate Builders
- 13 days for Listening Skill Builders plus Rate Builders
- 7 days for Listening-Notetaking Skill Builders
- 8 days for teacher-directed sessions

APPENDIX B: LISTENING SKILL BUILDER SESSIONS

SESSION 1

Begin by saying:

Do you find that you remember articles you read better than talks you hear? Most of us don't really concentrate when we listen. As a result, we don't understand or remember very much of what we hear. I'll give you an example. Take out a sheet of scratch paper for a minute. Now listen carefully, and write down the answer to each question:

1. Bread, about, head, breath, weather. (*Pause.*) The second word started with *b*. True or false?

2. My brother John and my sister Mary went with Lois and Alex to the fair. Helen stayed home. (*Pause.*) What was the sister's name? What was the brother's name?

3. Mrs. Adams forgot to take a bathing cap to the beach, although she remembered to take sunglasses, suntan lotion, a book, money, a watch, a bathing suit, and a lunch. (*Pause.*) What did she forget?

4. Suppose you were told: "In Room 646 there's a stack of books on the top right-hand shelf. Bring all the books whose titles start with *C* in here, and put those whose titles start with *T* on the lower left-hand shelf." Would you go to room 664, 464, or 646? (*Pause.*) Would you put the titles that start with *C* on the lower left-hand shelf or the upper right-hand shelf? (*Pause.*) Would you put the titles that start with *T* on the upper right-hand shelf or the lower left-hand shelf?

Now let's see how well you did on that. The answers are: 1. False. The word was *about*. 2. The sister's name was Mary. The brother's name was John. 3. Mrs. Adams forgot to take her bathing cap to the beach. 4. You would go to Room 646. You would bring the titles starting with *C* in here; you would not put them on a shelf. You would put the titles starting with *T* on the lower left-hand shelf.

If you got all the answers right, you did much better than most people would do.

We're about to start work in the SRA READING LABORATORY Listening Skill Builder program. This program will help you learn to listen more effectively. Listen carefully as I read Listening Skill Builder 1. When I've finished reading the selection, you will complete a comprehension check to find out how well you listened.

Listening Skill Builder 1

Think About Listening

Why don't people listen? One thing about listening which is rarely understood is that it involves constant *thinking*—thinking about the subject itself, thinking about what you already know of the subject, and thinking about what the speaker is saying. The problem in this is that all of us *think much faster than anyone can speak.*

When you read silently, you proceed at your own rate. If the material requires little thought, you can increase your reading rate. When you listen, your thinking must follow the rate at which the speaker is talking. Because there is such a great difference between the thinking rate and the speaking rate, the listener tends to get ahead of the speaker. He goes off on mental tangents of his own. Often he misses some of the important points. Even if he hears all the main points, he may not hear the details that back them up and tie them together. He has only *half* listened—and only half heard.

How can you follow a speaker's words? Can you slow down your thinking? No, you can't. But you can put all your mental processes to work constructively and *organize* what you're hearing while you're hearing it.

To help you do this, a better-listening formula, called TQLR, has been developed. It is similar to the SQ3R reading formula. TQLR stands for *Tune in, Question, Listen,*

and *Review*. Actually, you do all these things automatically when you listen well—especially when you listen to something that interests you a great deal. But by *thinking* about each step and getting practice in *consciously applying* each one, you can improve your use of these automatic processes so that you apply them every time you find yourself in a listening situation.

If you practice this better-listening formula, you will probably be surprised at how useful it is. You will understand more of what you hear, and you won't feel as if you were missing things. TQLR will give you confidence about listening and show you how to get more out of everything you listen to, in and out of school.

Here's how it works. The *T* and the *Q*, *Tune in* and *Question*, set the stage, as do the *Survey* and *Question* steps in SQ3R. You tune in to a speaker just as you tune in a radio to a station—you shut out everything else and focus your mind so that the message comes through loud and clear. You tune in a radio better and faster if you've thought ahead so that you can recognize the program when you find it on the dial. The same should be true when you tune in to a speech. As soon as you hear what the subject is to be, mentally call up everything you know about it. At the same time, anticipate what you're going to hear. Questions should start to form in your mind: What is this going to be about? What is the speaker going to say about this? What is his background?

If I had said that I was going to talk about how to listen, your *Tune-in* might have been a surprised "Is (he) (she) kidding? Everyone knows how to listen. You listen with your ears." But if you had also asked yourself "What on earth can we learn about listening that we don't know already?" you would have been tuning in, *and questioning*. You'd have already started using TQLR.

Now comes the *L* step of TQLR—*Listen*. While you listen you do two things: you hear what the speaker is saying, and you try to guess what he will say next. You don't just *wait* to hear what the speaker will say; you *anticipate* it by actively thinking about it. Nothing slips by you; you react to everything you hear. Actually, because of the speed of your thinking, you're going to be thinking about *something* whether you try to or not. If you try to anticipate what the speaker will say, you're steering your thinking in the right direction. It's as simple as that. But listening actively does take a little doing.

The last step of TQLR is *Review*. This step includes going back over what has already been said and connecting it with what is being said now. It's a kind of instant summarizing and evaluating. It's separating main ideas from subordinate points and details. It's asking yourself whether everything makes sense. It's sensing the speaker's purpose. This is exactly what you do when you're involved in a mystery story, whether you're watching it on television or reading it. The point is that with a mystery story you do it *automatically*, without giving it any thought, because you're interested enough to do so.

If you were as interested in everything you hear as you are in a good mystery, you'd never have to think about TQLR. But let's face it—you're going to do a lot of listening in your life that won't be for pure entertainment, but mainly for acquiring information.

Some of the Listening Skill Builder selections that I am going to read to you in the next few weeks will be of great interest to you. Others will be less entertaining, but will contain information that you will have to train yourself to hear, understand, and remember. During each Listening Skill Builder session you will use the TQLR formula while I read the selection. Then you will answer questions about the selection. The purpose of this program is to lead you to apply TQLR techniques deliberately and consciously, con-

stantly and consistently, *to everything you listen to.*

Open your Student Record Books to page 80, to the comprehension check for Listening Skill Builder 1. Points **A, B,** and **C** are three major points that were made in the selection. The sentences numbered 1–7 cover details that support one of the three main points.

HOW WELL DID YOU LISTEN?

A Many people are poor listeners because they don't organize their listening.

B The TQLR formula organizes your listening for you.

C If you concentrate on TQLR, its use will soon become automatic.

Now read the sentences below and decide which point each sentence supports. Write **A, B,** or **C** next to the sentence.

B 1. Tuning in helps you to focus on what you hear.

C 2. Before you do a thing automatically, you must practice it over and over.

A 3. A poor listener often fails to ask himself questions as he listens.

B 4. The *L* of TQLR involves both hearing what is being said and anticipating what will be said later.

A 5. Because thinking is faster than speaking, the listener's mind tends to wander away from what is being said.

B 6. Answering questions about a speech helps you to review what was said.

C 7. If TQLR becomes a listening habit, you will get as much from a class lecture as from listening for pleasure.

When students have completed the comprehension check, read aloud the correct responses (inserted). Direct students to note possible rights and their number right. Have them figure their percentage and chart their score on page 106 of their Student Record Books.

Go over the comprehension check and discuss student responses. Encourage students to discuss the main and subordinate points. Do students agree that **A, B,** and **C** were the most important main points of the Listening Skill Builder? Would they suggest others? Does it matter in which order the main points are listed? Point out that in listing the main points of any material, it is always important to make sure they succeed each other logically; with some kinds of material—historical, cause-effect, biographical—the order is very important indeed.

SESSION 2

Begin by saying:

Listening Skill Builder 2 was adapted from material gathered by Dr. Ralph Nichols, a University of Minnesota professor who conducts classes in listening. The title of this selection is "You Don't Know How To Listen."

Use the TQLR formula as I read this selection. By now you should have already *Tuned in*—you know what the selection is about, and you have your mind focused on the subject. You should now be asking questions about the subject. What will be said about listening? Be ready to compare what is said with what you have already learned. What new ideas will be suggested? As you listen, continue to ask yourself questions. Now begin the *L* step—*Listen.*

Listening Skill Builder 2

You Don't Know How To Listen

For the last several years I have been testing the ability of people to understand and remember what they hear. At the University of Minnesota we have examined the listening ability of several thousand students and, more recently, of scores of business and professional people in adult-education courses. In each case, the person tested listened to short talks

by various faculty members. He was then examined for his grasp of the content.

These extensive tests have led me to this general conclusion: *Immediately after* the average person has listened to someone talk, he remembers *only about half* of what he has heard—no matter how carefully he thought he listened. *Two months* after listening to a person talk, the average listener remembers only about *twenty-five per cent* of what was said.

A survey completed in 1929—possibly the only survey of its kind—showed that all of us do approximately the same amount of listening. Does that seem surprising? The supervising director of research and adjustment for the Detroit public schools studied the personal communications of sixty-eight persons with different occupations to determine the percentage of time they spent talking, reading, writing, and listening. Every day for approximately two months, the sixty-eight persons kept tabs on these activities. It was found they spent nine per cent of their communicating time writing, sixteen per cent reading, thirty per cent talking, and *forty-five per cent listening.*

Not long ago the managers of a large East Coast industrial firm came to work one morning to find the plant surrounded by pickets. It was almost a complete surprise. Labor negotiations had been under way, but the top management had no idea a strike was impending; in fact, it was the first strike in the plant's history. What had happened to cause it?

It developed that the firm's director of labor relations had warned a member of the top management that a strike was possible. He had even recommended action to prevent it. But no action was taken, and the firm lost five days work before the strike could be settled.

The management member who had been warned said that his immediate reaction to the recommendations of the director of labor relations had been the thought that "a strike couldn't happen here!" With that thought, *he ceased to listen,* and he never really considered the seriousness of the warning.

Workers in industry need to be good listeners too. Failure to pay attention to what is told them can be costly, even tragic. A New York plant once hired a number of employees to work at a forge used for heating tool steel. A meeting was held to instruct the new employees in the use of grappling irons which hold the steel in the forge. When a man finished with a hot grappling iron, the instructor said, he was to hang it on the wall to the right of the forge. As the irons cooled they were moved to the left wall, so whenever an employee needed a grappling iron he would take it from the left wall.

Shortly after the meeting, an employee hung a hot grappling iron on the wrong wall. Another man walked into the room, reached up and grabbed the hot iron. The metal burned him and stuck to the skin of his hand. Unable to let go, he fainted and fell, with the grappling iron still stuck to his hand. The burns impaired the man's ability to work for the remainder of his life.

The man who had placed the iron on the wrong wall swore that he hadn't heard anybody say that hot irons were to be hung to the right of the forge. Other employees, however, testified that he was present when the instructions were given.

I'm sure this man was telling the truth—he didn't hear the instructions, because his mind was somewhere else at that moment. He probably never realized that the real reason he didn't hear was that he was a poor listener.

The forge incident was sudden and tragic. But the results of bad listening habits show up most often in little incidents that accumulate from day to day, like the one told me by a Minneapolis sales manager. He said: "I sent a man down to Chicago with explicit instructions as to what he was to do when he

got there. I even asked him to repeat these instructions to make sure he understood them. Yet as soon as he arrived in Chicago he telephoned me to ask, 'Now let's see, chief, what was it I was to do first off?' That's the kind of business that costs time and money."

At best, that salesman had sacrificed his prospects of promotion; at worst, he might have been fired. Regrettably, his case is not unusual, particularly among young people just starting out in business. "One big difficulty with new, inexperienced salesclerks," said the manager of training for Macy's department stores, "is that they don't listen. A customer steps to the counter and says, 'I want that blouse on display there. I'd like size fourteen with short sleeves.' The clerk hears only: 'Blouse on display. Size fourteen.' Anxious to please, she rushes away and brings back a blouse—size fourteen, but with long sleeves. The customer again explains, 'Short sleeves.' Back goes the clerk, and again the customer waits.

"In a store the size of ours," the manager said, "such incidents can run into money. There's useless work for the clerk, unnecessary handling of merchandise and, more important, possibly an irritated customer. That's why in our training we always stress: '*Listen* before you act.' "

From "You Don't Know How to Listen," by Dr. Ralph G. Nichols and Leonard A. Stevens, Colliers, *1953. Copyright © 1953 by Dr. Ralph G. Nichols and Leonard A. Stevens. Reprinted by permission of Curtis Brown Ltd.*

Tell students to indicate their response by underlining its letter.

HOW WELL DID YOU LISTEN?

1. **Ralph Nichols is**
   - **A** the personnel manager of a large company
   - **B** a department store executive
   - **C** a university professor
   - **D** a labor union leader

2. **Dr. Nichols says that immediately after a lecture people recall**
   - **A** about one half of its content
   - **B** only a quarter of its content
   - **C** almost none of its content
   - **D** nearly all of its content

3. **The Detroit study proved that people spend**
   - **A** most of their communicating time talking
   - **B** more time listening than talking
   - **C** as much time writing as listening
   - **D** less time listening than reading

4. **Incidents in this article show that poor listening habits**
   - **A** are a common fault
   - **B** can have serious consequences
   - **C** can be corrected easily
   - **D** both **A** and **B**

5. **The plant strike occurred, in part, because**
   - **A** management deliberately ignored strike warnings
   - **B** no advance warning was given
   - **C** the workers wouldn't listen to management
   - **D** management didn't really hear the warning

6. **The salesman phoned his boss in order to**
   - **A** clarify confusing instructions
   - **B** ask what his instructions were
   - **C** get revised instructions
   - **D** explain why he couldn't follow his instructions

7. **Salesclerks who do not listen well may**
   - **A** irritate customers
   - **B** lose sales
   - **C** make more work for themselves
   - **D** all of the above

SESSION 3

Begin by saying:

The Listening Skill Builder you're going to hear today was written by Dr. Walter Stromer, professor of speech at Cornell College in Iowa. Dr. Stromer has long been concerned with the bad listening habits of students, and he has developed clinics to correct these bad habits. You will find that some of his suggestions echo the principles of *Tune in, Question, Listen,* and *Review* that we have been using. Be sure that you use the steps of the TQLR formula as you listen to the selection.

The title of this selection is "Learn How To Listen." In it Dr. Stromer discusses six common listening errors and ways to correct them.

Listening Skill Builder 3

Learn How To Listen

What are the faulty listening habits that threaten us in so many ways? Here are some of the more common ones that I've observed in a close study of my students:

1. *Our minds won't wait.* Many times our thoughts race along faster than most people speak. So, while we are waiting for the speaker's words, our thoughts go off on a tangent and sometimes remain away too long. We *want* to hear it all. But our minds tune out, come back, tune out again. . . . *Why doesn't someone kill that fly? . . . I wonder who just came into the other room. . . .* Suddenly a few words penetrate: "Now to get back to my suggestion," the speaker is saying. . . . *What was it he suggested?* . . . Such tuning-out lapses are common and sometimes costly, especially if it's your teacher or your boss who's talking.

2. *We think we know already.* Sometimes we're so sure we know what a speaker is going to say that we listen with just "half an ear." A newspaper publisher once told me how this practice cost him a sizable sum. A regular client telephoned an order for a new series of ads, but the person taking the order simply wrote out a standard order form. Not until too late was it discovered that the client had wanted the new ads to be four times as large as the old. But since the smaller ads were already set in type, the client decided to run them. One clerk's job around that newspaper office was pretty shaky for a time.

3. *We're looking, not listening.* How often in introductions has a name failed to penetrate because your mind was occupied with its owner's appearance or his mannerisms? This probably happens far more often than you suspect. Information often fails to register because of such inattention.

4. *We are busy listeners.* We try to listen while giving part of our attention to a newspaper or a radio or TV program, or worrying about something in our personal lives. No wonder we don't really hear.

5. *We miss the big idea.* Once I gave my students a list of vocabulary words that would appear in a recording of a newscast. The students were to listen for these words and consider how they were used in *context.* But when I questioned them about the broadcast's content, they replied, "Oh, we weren't listening for that; we were just listening for the words."

The poor listener "just hears words." Have you ever had the feeling that a speaker said a lot, but that you didn't quite "get" it all? This may have been the speaker's fault, but possibly it was yours. Maybe you haven't learned to look for the main idea and the important supporting details.

6. *Our emotions make us deaf.* Do you recall a speech or conversation that made you angry? How well did you listen once your blood started to boil? When someone offers opposing ideas on a matter about which we have a strong opinion, we unconsciously feel that it's risky to listen. We might hear something that could make us question our own views. We stop receiving mentally while we plan our verbal counterattack.

We may be just as deaf when we listen to people with whom we are in general agreement. Instead of keeping alert and applying the standards of critical listening, we tend to accept blindly whatever they say. *Both* kinds of deafness are bad listening habits.

The six errors we have just mentioned are among the most common listening faults. With some effort, you can correct those listening faults that may be handicapping you. I recommend these ways to make yourself a better listener.

1. *Learn to concentrate.* Practice such games as "Take 2 plus 3, minus 5, plus 4, times 2, minus 6—what's the answer?" Exercises similar to these are used as listening exercises because they help you keep your mind on the subject at hand.

2. *Run a TV test.* Listen with a friend or relative to a radio or television talk. See how many of the ideas you can recall. If you find yourself floundering, "Well, he sort of talked about . . ." you may have missed the main point. With the other listener, try to agree on a specific statement of the main ideas.

3. *Accept controversy.* When someone brings up a controversial subject, don't "go deaf." Check your all-too-natural tendency to stop listening while you think up devastating remarks to throw back at him. Instead, plan a question based on his remarks. Not the kind that cuts the opposition down to size, but one that shows that you understand what he has said.

4. *Repeat instructions.* Practice repeating instructions and directions correctly. Unless you can repeat them, you obviously will not be able to carry them out properly.

Good listening isn't easy. Effective listening —hearing, understanding, and remembering— takes a great deal of energy. But it pays off.

Changing listening behavior isn't quick or easy, but it is worthwhile. If you can become a better listener, you may get higher marks in school; you may improve relations with your family and friends; and you may be a more successful employee or employer.

Based on "Learn How To Listen," by Dr. Walter Stromer as told to Eileen Daly, This Week *magazine, 1960.*

HOW WELL DID YOU LISTEN?

1. To learn to listen well we must

A recognize other people's errors
B practice good listening habits
C use SQ3R at all times
D listen for all the details

2. Our thoughts tend to go off on tangents because

A thoughts are faster than speech
B we don't want to listen
C people talk too rapidly
D both **A** and **C**

3. The students told to listen for certain words in context should have

A tried to guess what the speaker would say
B listened to sentences and ideas
C checked off each word as it occurred
D referred to the dictionary while listening

4. Our emotions sometimes make us deaf because we

A don't want to question our own views
B immediately start planning a counter-attack
C unconsciously feel it's risky to listen
D all of the above

5. If we disagree with a speaker, we should

A tell him so immediately
B listen carefully to his argument
C be sure we understand him
D both **B** and **C**

6. Probably a good listener is one who

A concentrates on the wording of a speech
B accepts whatever he hears
C never questions the speaker
D listens critically to what is said

7. **This selection and the better-listening formula both tell us to**
   A tune in, question, listen, review
   B practice specific listening rules
   C correct all our listening habits
   D spend more time listening

SESSION 4

Begin by saying:

As recently as the 1950s, one sometimes heard people complaining that there was nothing left to invent in the world—that everything had already been discovered.

Then along came the space age, and suddenly everyone realized that possibilities for new inventions were unlimited. As long as people exist, someone will find ways to improve the things we use, the clothes we wear, the food we eat.

Inventors can be engineers, untrained workers, housewives, or teen-agers.

The article you're about to hear is called "Advice for Inventors."

Listening Skill Builder 4

Advice for Inventors

Necessity is far from being the mother of invention. It is not even the stepmother of invention. As someone aptly said, "The largest room in the world is the room for improvement." And the whole imperfect world lies spread out for the inventor to see. Any person who discovers inefficiency and measures the shortcomings of the world's devices is already half an inventor.

Invention by inspiration has now been replaced by invention by *deliberation*. One seeks consciously and methodically for a certain desired result. With a good practical mind, a good workshop, and strict dedication to one problem at a time, the inventor has little reason for failure.

Most of our successful lone-wolf inventors started their careers on a part-time schedule. They did their inventing in spare time until they hit upon one successful idea that made it possible for them to become full-time inventors. Many professional inventors are mechanical or electrical engineers or physicists. Often they work for corporations.

Some inventors specialize. Not a few men have specialized in such fields as the invention of toys or kitchen equipment. The specialist tries to learn as much as possible about the field in which he intends to work. The inventor who doesn't specialize may cover a wide range. He simply watches for improvements that might be made in anything from electric popcorn bowls to tricycles. In a sense, the world is his oyster.

Obviously, no inventor wants to waste time working on a device that has already been patented. To prevent this, inventors often have the U.S. Patent Office searched before they spend much time on the development of an idea. They can take their idea to a patent attorney who will have a professional searcher go through the records of the Patent Office to see whether a similar patent has already been granted. Or an inventor who lives in a large city can first consult the patent files of the public library. The searcher sends the patent attorney copies of patents that seem closely related to the inventor's idea.

The patent attorney then examines these patents to determine whether one or more of them anticipate the inventor's idea either as a whole or in part. After this examination, the patent attorney either gives his client the green light or advises him against proceeding further. If the latter, a great deal of time, money, and disappointment may be saved.

If such a search is not made, an inventor might file an application for a patent only to have the Patent Office turn it down. The inventor thus loses the money he invested in his idea, the money he paid his patent attor-

ney to prepare the patent application, and the filing fee paid to the Patent Office. None of this money can be recovered.

All inventors do not work alike; most have their own way of developing an idea. Whatever the method, the would-be inventor will wish to work efficiently and to avoid crude mistakes and disappointments.

When a new idea is conceived and is being worked on, an inventor must ask himself certain questions. Is it really a new idea? Is it practical? Will there be a good market for the product? And before an invention can be patented, more questions must be answered—questions having to do with the parts, for example. Are the parts used the correct ones, the simplest, and the fewest possible? Will the parts—or the article itself—wear out too quickly? What about the article's safety? And, of course, is it really as good as similar articles already on the market?

Cost enters into the problem in many ways. Not only must the new device be inexpensive enough to sell, but the cost of shipping it, of any power that might be needed to run it, and of making or retooling existing machines to manufacture it, must all be within a reasonable cost range.

Practically all inventions and discoveries are made by trial and error. The inventor simply keeps on trying different means, or different parts, until he gets his device to work in a suitable and efficient manner.

Except in the case of extremely simple items, no invention is perfected in a few hours or even in a few weeks or months. The inventor first isolates his main problem. Then he considers, one by one, his minor problems. These usually relate to the design and function of the various parts that make up the whole. Therefore the whole invention may really amount to a number of small inventions, so to speak. Each one may require much thought and concentration.

Certainly the field of invention is no place for a young man in a desperate hurry. Good inventions are rarely, if ever, thrown together quickly. Good inventors work slowly, patiently, and cautiously.

Specified excerpt from YOUNG INVENTOR'S GUIDE *by Raymond F. Yates. Copyright © 1959 by Raymond F. Yates. Reprinted by permission of Harper & Row, Publishers, Inc.*

HOW WELL DID YOU LISTEN?

1. The author's advice to inventors is general, probably because

A he himself is not an inventor
B he doesn't want them to use his methods
C methods vary with inventions
D both **B** and **C**

2. A patent search is made so that the inventor can

A profit from other inventors' ideas
B avoid wasting his time
C get ideas for improving his invention
D both **B** and **C**

3. The deliberate inventor's first step is to

A consult a patent attorney
B determine where there is room for improvement
C consider the cost of his invention
D design the parts needed

4. The patent attorney determines whether

A the inventor has done the best possible job
B a similar patent has been granted
C there is a need for the invention
D the invention will make money

5. Before patenting his invention, an inventor should ask himself whether it

A contains the fewest possible parts
B can be manufactured at a reasonable cost
C is safe for the user
D all of the above

6. **Inventing is not for the impatient because**

A perfection comes by trial and error

B it takes a long time to get a patent

C possibilities for new inventions are limited

D most inventions have a limited market

7. **From the selection, we can conclude that**

A most inventors are young men

B all inventors are engineers

C the best inventor is the lone wolf

D inventors must be exceptionally observant

SESSION 5

Begin by saying:

Today's Listening Skill Builder is a true story called "Adventure in Rio," by Raymond Lee Ditmars. When Mr. Ditmars was working in Rio de Janeiro, Brazil, someone gave him a rare but harmless snake. The snake had to be fed immediately, so he put it in his dresser drawer and began to search the city for the small fish it required.

Now you are tuned in to the situation, and you may be thinking, "What a ridiculous situation! What is going to happen?"

Have you started on your questioning? Then let's see how good you are at figuring out the ending. Use the *L* step of TQLR, *Listen,* and try to *anticipate* what is going to happen.

Listening Skill Builder 5

Adventure in Rio

I walked and walked around Rio, but I couldn't find any aquarium stores. A trip to the markets, where there were booths that sold parrots and marmosets, didn't help—no fish. Either my Portuguese was poor, or the vendors spotted me for an American, who might be induced to buy anything. In response to my inquiries for small, fresh-water fish, they offered me everything from dogs to monkeys.

Not far from the hotel, however, I made a discovery that looked as if it might solve the problem. It was a fountain with a large circular bowl surrounded by a low stone wall, and in the bowl were numerous small silvery fish. They swam toward my fingers in investigation.

My idea was good but the thing needed planning, so I sat down on the wall to think it out. It would have to be a night job. Pedestrians in Rio are too curious to bypass any happening out of the ordinary. In the commendable fashion of leisurely enjoyment of life, which North Americans have cast to the winds, Brazilians will even tarry in fair-sized groups to see a man changing a tire. No, the thing had to be done at night. Fortunately there were no benches in the little park. And there was another good point. Several radiating paths stretched from the fountain for a considerable distance. Nobody could suddenly pop around a corner—particularly not a policeman. The latter was a serious consideration, for the police were exceptionally vigilant just then, as a revolution was alleged to be brewing.

A man catching fish in a fountain at night might be harmlessly enough engaged, but he could be in trouble if he were discovered by a policeman with jumpy nerves. I was not planning to get permission to capture the fish. If I sought to get a permit, the red tape of Brazilian formalities would drag on and on, and the serpent would starve to death. I was figuring on a properly humane act; still it would require planning and stealth. I was gratified to note that a suspended electric light —not too near—would render the operation possible.

The matter of getting a small net, and keeping it secreted, bothered me. The handle would have to be cut off.

I stopped in the shelter made by the indented door of a hat store to rest a little. What a lucky stop! Right in front of me, in the window, was the solution to my net problem. It was a stiff straw hat of the "sailor" shape, with a crown of open lattice design something like network. No more unobtrusive net could be imagined than a hat worn on one's head. I could wear the hat on the way to the job and then saunter back to the hotel without a hat. Within five minutes I was the owner of the openwork hat. I strolled leisurely back to the hotel.

About ten o'clock that evening I left the hotel wearing the hat and carrying a small tin pail in a brown paper bag. The package looked like a carton of ice cream. The little fountain plaza was not deserted when I arrived; I had to wait a few minutes. Then a wide gap in the flow of pedestrians enabled me to get my pail out of the bag, scoop up some water, and shove the pail against the darkest side of the fountain. The critical moment was approaching—the test of the hat. Several people passed by, but no one paid any attention to me.

The next time there was nobody in sight, I lowered the hat into the water. The fish showed as black forms against the bottom of the pool. I slid the hat under one group that was close to the edge, and they did little more than point their heads one way and move a foot or so. Making a scoop with the hat, I was gladdened to see some of them flapping within it. That moment was so tense that I can still remember that there were three fish in the hat. I transferred the fish to the pail, and another scoop brought out a couple more. But a man was now headed for the fountain.

I rested my hat on the ledge, casually looked at my watch, and waited for the stroller to pass. The fish flapped quite audibly.

The promenader approached my side of the fountain, stopped, gazed into the big basin, then passed on. Fortunately, he left in time for me to get the fish into the pail before they expired.

The third scoop was the best. It netted a half dozen fish, but the hat was collapsing. By the time I had these fish in the pail the usefulness of the hat was over. It started to unwind like a live spring. There was now another walker, within a quarter of a block and steadily coming on, so I slipped the pail into the paper bag and, in as nonchalant a manner as possible, picked it up and steered for the hotel.

There was but one place to keep the fish, and that was in the commodious bathtub. There were enough fish to give the snake three meals, each several days apart. After that the reptile would need no further feeding on the steamer trip to New York. A two-week fast was not hazardous for snakes.

How that serpent gulped the three fish I fed it that evening! The balance of the fountain contingent swam in a foot of water.

The high spot of the adventure, however, came later.

Finding some bits of bread floating in the tub, I realized that the chambermaid had discovered the fish and was solicitous about their welfare. When the last fish had disappeared, I thought she gave me a sharp glance whenever I passed her along the hallway. Her behavior gave me a disturbing idea, and this I determined to clear up by questioning one of the bellboys. He spoke some English, and we were pretty good friends, as I had tipped him liberally for doing odd jobs for me.

I told him about the chambermaid, and the fish, and the way she glanced at me, then asked him what she thought I did with them.

"She thinks you ate them." And in his voice was a quaver of doubt, matching the glances of the chambermaid.

Reprinted with permission of Macmillan Publishing Company from Thrills of a Naturalist's Quest *by Raymond F. Ditmars. Copyright © 1932 by Macmillan Publishing Company, renewed 1960 by Gladyce Ditmars.*

HOW WELL DID YOU LISTEN?

1. **The author had to get some fish immediately because**

   A his snake was starving

   B he was leaving Rio the next day

   C there were rumors of a revolution in Brazil

   D both **A** and **B**

2. **The author first tried to get fish by**

   A applying to the government

   B catching them himself

   C buying them

   D tipping the bellboy

3. **The author carried out his plan at night because**

   A fewer people were about then

   B the police were less suspicious then

   C the fish were less afraid then

   D the snake usually ate then

4. **The straw hat was ideal for the author's purpose because it**

   A was easier to use than a net

   B would not attract people's attention

   C was very inexpensive

   D made him seem more conspicuous

5. **The ending of the story reveals that**

   A the chambermaid believed the author ate the fish

   B the bellboy knew the author had a snake

   C the bellboy was not sure what had happened to the fish

   D both **A** and **C**

6. **The suspense of the story revolves about whether the**

   A author would be caught

   B snake would live

   C fish were edible

   D snake would be discovered

7. **The author felt that taking fish from the fountain was**

   A an illegal act under any circumstances

   B the simplest and most obvious plan

   C a prank not worth the risk

   D a justifiable action under the circumstances

SESSION 6

Begin by saying:

You are about to hear a description of one of America's famous naval battles, led by Lieutenant Stephen Decatur in the early nineteenth century. It's called "Pirate Fighters." Tuning in, you will probably think of a band of swashbuckling pirates with cutlasses and gold earrings.

One of your questions may be: "Were the Americans fighting a band of pirates, or were they pirates themselves?"

Listen carefully, so that you can distinguish the different ships and understand what happened in the tumult of the battle.

Listening Skill Builder 6

Pirate Fighters

The crack American frigate *Philadelphia* lay in Tripoli harbor on the coast of North Africa, a captive of the insolent governor, or bey, of that city. The fine thirty-eight-gun warship had been sent there to keep the pirate leader's ships bottled up in their own waters so that they could no longer prey on American merchantmen. But she had grounded on one of the treacherous reefs in the then uncharted harbor, and had been forced to surrender.

To the Americans who had sailed a squadron into the Mediterranean to keep the bey and his sea raiders in line, nothing could have been worse than to have the pride of their navy in the enemy's hands and flying the

Turkish emblem. Sad though they would be to lose her, it would be better, they said, to send her to the bottom. But how could they do it when the ill-fated man-of-war was protected by a hundred or more of the bey's shore guns and guarded by several of his ships? By simply surprising and outwitting the enemy, said Lieutenant Stephen Decatur, volunteering for the dangerous mission.

Instead of using an American ship, Decatur would sail in the *Mastico,* a small merchantman he had captured from the pirates only a few months before. Although he had rechristened her the *Intrepid,* she still carried her Mediterranean rig, and the pirates would probably think her a friendly vessel. His covering warship, the *Siren,* he would disguise as a harmless merchantman. The pilot of the *Intrepid* would be a sailor from Sicily, whose appearance and speech would help trick the Tripolitans into thinking the ship a friend.

With a picked crew of seventy officers and men, Decatur finally set out across the Mediterranean. As he neared the harbor of Tripoli, he ran into a fierce storm. It was all that he and his men could do to keep from crashing on the rocks. But at last, on the evening of February 16, 1804, Stephen Decatur stood ready to strike. Leaving the *Siren* near the harbor entrance, ready to act if she were needed, he had six or eight of his men aboard the *Intrepid* disguise themselves as sailors from the nearby island of Malta. He stationed them on the deck. He ordered the others, armed with cutlasses and pistols, to hide in the shadows.

As the moon came up that night, Decatur boldly sailed into the enemy's harbor until he was within hailing distance of the *Philadelphia.* When the Tripolitans guarding the American ship challenged the *Intrepid,* her Sicilian pilot explained that his ship belonged to Tripoli and had lost her anchor during the storm of the day before. Would they allow him to stay in the harbor for the night?

Completely taken in by the pilot and the disguised sailors standing on deck, the Tripolitans helped Decatur's men tie up to the frigate. But just as this was done, someone on the *Philadelphia* discovered the armed Americans crouching in the shadows on the *Intrepid.* Immediately the cry *"Americanos! Americanos!"* rang out over the harbor.

Now that the cat was out of the bag, Decatur and his men clambered onto the *Philadelphia*'s deck. In a swift attack the Americans killed some twenty of the pirate guards in hand-to-hand fighting, and the rest of the panicky Tripolitans jumped overboard and swam for their lives. With the *Philadelphia* cleared of the enemy, the Americans set her afire, and she was soon blazing from stem to stern. As the roaring flames licked at their heels, some of the attackers barely escaped in time, and it was only by leaping down into the *Intrepid*'s rigging as she pulled away that Decatur himself reached safety.

But all was not over yet, for the big guns in the city now began to roar. As the shots spattered about them, the Americans took to their oars, rowing like mad. Luckily, only one shot ever touched the *Intrepid,* and only one of her men was wounded. Within twenty minutes Decatur had fired the *Philadelphia* and put himself out of range of the enemy's guns. Safe at last, the Americans stopped to rest and breathlessly watched as a tremendous explosion blew up their frigate.

The fearless twenty-five-year-old Decatur had carried out the assault that Lord Nelson, the great British admiral, was to call "the most bold and daring act of the age." The destruction of the *Philadelphia* did not end America's long-drawn-out war against the Barbary pirates, nor did it keep the sea robbers from trying to capture her trading ships and crews. But the success of Decatur in his small captured merchantman won new respect for the youthful United States Navy, both at home and abroad, at a time when even Amer-

icans were far from sold on having any navy at all.

Excerpted from Ships That Made History *by Helen Mitchell and W. N. Wilson, Whittlesey House, a division of McGraw-Hill Book Co., Inc.*

HOW WELL DID YOU LISTEN?

1. **The main result of the *Philadelphia* incident was that it**
   - **A** ended the war with the Barbary pirates
   - **B** won Decatur lasting fame
   - **C** curtailed pirate activities
   - **D** enhanced American naval prestige

2. **The *Philadelphia* was sent to Tripoli to**
   - **A** negotiate a peace treaty
   - **B** transport valuable cargo
   - **C** bottle up the pirates' harbor
   - **D** capture the Turkish fleet

3. **The *Philadelphia* fell into pirate hands when**
   - **A** surprised by pirates
   - **B** defeated in battle
   - **C** disabled by a fierce storm
   - **D** none of the above

4. **Stephen Decatur was a**
   - **A** young American naval officer
   - **B** pirate working for the U.S. Navy
   - **C** former pilot of the *Philadelphia*
   - **D** both **A** and **C**

5. **Decatur's mission was to**
   - **A** trade ships with the pirates
   - **B** attack Tripoli
   - **C** destroy the *Philadelphia*
   - **D** pilot the *Philadelphia* to safety

6. **Decatur sailed in the *Mastico* because**
   - **A** the pirates would think the ship friendly
   - **B** she was a harmless merchantman
   - **C** he had captured it himself
   - **D** she required only a small crew

7. **The *Siren* was a**
   - **A** danger signal sounded by the Turks
   - **B** camouflaged weapon aboard the *Philadelphia*
   - **C** warship disguised as a merchantman
   - **D** small captured pirate ship

SESSION 7

Begin by saying:

Often a factual subject can be presented in a humorous way. To do this, a speaker often uses the technique of exaggeration. Sometimes he exaggerates a single word: Instead of saying "The kitten purred," he says "The kitten sounded like an earthquake." Sometimes he exaggerates his reaction to the facts: "I saw with horror that the kitten was waking up." Or he draws exaggerated conclusions from the facts: "If the kitten continues growing at this rate, it will soon be an elephant."

When you hear a humorous discussion, it is often difficult to decide what is fact and what is exaggeration. Use TQLR to help you distinguish between humor and fact in this Listening Skill Builder.

Listening Skill Builder 7

Dolphins Are Happier Than People

Somewhere in the mists of prehistory, a sea mammal called a dolphin slithered onto dry land to see how it felt to be a finny Adam in a brave new world.

The dolphin didn't like it. We don't know why. Whatever the reason, the dolphin plunged into the ocean again, slipped a pair of swimming mittens over its hands, absorbed its legs, and evolved several talents that now pose a possible threat to the superiority of the human race.

If this sounds like an Indian legend straight from the shores of Gitchee Gumee, it is only

because the truth about dolphins is every bit as strange as fiction.

For instance, Pliny the Younger, in the first century A.D., wrote about a dolphin that made friends with a small boy and gave him rides on its back. We thought Pliny had rocks in his head until a few years ago, when a lady dolphin was doing precisely that near the town of Opononi in New Zealand. This dolphin was so beloved that when it died the townspeople gave it a proper funeral.

Herodotus, a Greek historian of the fifth century B.C., told of a young man who jumped ship to escape being murdered by villainous sailors and then realized that he couldn't swim. A friendly dolphin nosed him safely to shore.

Ridiculous? Not according to Mrs. Yvonne Bliss of Stuart, Florida, who in 1960 fell overboard off the coast of Grand Bahama Island in the West Indies. She swears it was a dolphin that saved her life by guiding her to the beach.

Everybody knows that a dolphin can jump through hoops, retrieve objects and toss them back, play water polo, and pull surfboards. However, a dolphin's talents are not limited to fun and games. Among them is its strange ability to ripple its skin, more or less as some humans wiggle their ears, which reduces water friction and enables it to swim up to twenty miles per hour faster than any other living creature. This fascinates submarine designers. They are working now to perfect a flexible skin that will do for the submarine what the dolphin's skin does for the dolphin.

Another asset is the dolphin's built-in sonar system, which is better than any electronic sonar that man has yet devised. By emitting sound waves and listening for their echoes, a dolphin can swim blindfolded through an obstacle course and detect an object in the water as small as a BB.

We still haven't discovered how this works. British naval scientists, however, believe that dolphins can be trained as underwater spies to track down enemy submarines and saboteur frogmen without arousing suspicion.

When a spying dolphin sights something fishy, how will it report the fact? The day may come when a dolphin can be taught not only to sound out enemy activity but to tell us about it—and in English!

Aristotle was one of the first to observe that a dolphin can talk, after a fashion. By forcing air through the breathing hole on top of its head and manipulating the lips of the hole, the dolphin can whine like a puppy, bark like a seal, whistle like a teakettle, click like a castanet, and utter an unmistakable Bronx cheer. While other dolphins seem to have no trouble deciphering these noises, we haven't been able to make head or tail of them. One man, however, John C. Lilly, an American scientist, found that by recording the rapid-fire chatter of a dolphin and playing it back at one-fourth normal speed, he could make out such phrases as "one two three" and part of a sentence, "Yeah, it's six o'clock." Dr. Lilly thinks that the dolphin had heard him say these words, and was mimicking him.

Scoffers claim that you can get the same results from a low-speed recording of a foghorn, but if Dr. Lilly is right it might be possible to teach a dolphin to talk, as one would teach a parrot. Eventually, Dr. Lilly hopes, we might even be able to school a dolphin to make up sentences and carry on a halfway decent English conversation. What supports this bizarre hope is the fact that dolphins are the eggheads of the animal world (excluding man, so far). Tests have shown that they are as intelligent as chimpanzees, who for many years were the undisputed IQ champs, and they may even be smarter. They also love to learn. This is what is so disturbing.

Obviously, with its superior mind, its remarkable sonar, its articulate breathing hole, and its hunger for learning, a bright dolphin could organize a pandolphin union and agi-

tate for equal opportunity with humans. Then the dolphins will campaign for universal suffrage, and inevitably the ugly question will be raised: Can a dolphin become President?

Alarmed by this prospect, we paid a visit to the nearest dolphin enclave to size up these potential menaces to our way of life.

Our first sight of them was not reassuring. They're bigger than we are. They range up to eight feet in length and weigh as much as three hundred pounds, and they have ninety-six teeth. They do have a disarming smile, but we learned that their smile is permanently engraved on their face by some quirk of inheritance and that they keep smiling even when pounding their enemies to a pulp with their battering-ram snouts. Few human politicians can equal that!

Our informant was the zoo's dolphin trainer, John Donahue, who left no doubt in our mind that if the presidential issue should come to a head, he would go prodolphin. "I get along better with animals than with people," he announced, fixing us with a steely eye.

Unsettled by his partisan stand, we ventured timidly, "Are dolphins as intelligent as we think they are?"

"They're awfully smart," he replied. "For instance, ours have spats and feuds, but they don't kill each other as other animals do. I credit that to their intelligence." We had the impression that by "other animals" he meant us.

"Dolphins are also sensitive and perceptive," he continued. "When I give them a friendly look, they come up to be petted. When I give them a dirty look, they run to the other side of the tank."

We asked the crucial question. "Do you think dolphins can hope to compete in a man's world?"

He stared at us as if we were some kind of nut. "See for yourself," he said.

We did. Three graceful dolphins were frisking about like kids in a swimming hole, flipping each other playfully with their tails, scratching their backs on the giant scrubbing brush fastened to the bottom of the tank, and making calf eyes at John Donahue when they arched out of the water for a breath of fresh air.

Were these the new revolutionaries, the instigators of an underwater plot to seize the government? Could they even make good as spies? Could they coldly report an enemy frogman, or would they sidle up to him and give him a companionable nudge?

The answer was crystal clear. Dolphins haven't the slightest ambition to be secret agents or anything else. Plainly, they have never regretted the decision they made eons ago to shake the dust of earth from their flippers and commit themselves to the sea.

Of course, dolphins still harbor a vestigial curiosity about the two-footed mammal who chose to remain on dry land. They come to his rescue when he's drowning. They perform for his amusement, show off their sonar for his scientific edification, and talk to his tape recorders. They may even be willing to learn his language, if he asks them nicely.

But they will not risk spoiling their long friendship with man by challenging his mammalian superiority. This we can say with complete confidence: There will never be a dolphin in the White House.

Based on "Porpoises Are Happier Than People" by Gordon Gould, Chicago Tribune, *1962. Reprinted by permission.*

HOW WELL DID YOU LISTEN?

1. **Dolphins used to be, but no longer are,**

   A mammals

   B land animals

   C water animals

   D both **A** and **B**

2. Stories of dolphins saving lives are

A tales that the author does not believe
B old legends that have been disproved
C the truth as far as we know now
D exaggerations by the author

3. Recent tests have shown that dolphins are

A not really very fast swimmers
B not quite as intelligent as chimpanzees
C blind
D highly intelligent animals

4. Submarine designers are interested in dolphins'

A capacity for speech
B ability to reduce water friction
C sonar system
D both **B** and **C**

5. Dr. Lilly believes that his pet dolphin was

A making up its own sentences
B mimicking him
C teaching others to talk
D reporting what it saw

6. The author said seeing dolphins made him

A more alarmed about their intelligence
B less trusting toward their trainer
C less impressed by scientific experiments
D reassured about their intentions

7. Which statement about dolphins is an exaggeration?

A A dolphin can jump through hoops.
B A bright dolphin could organize a pan-dolphin union.
C They're bigger than we are.
D Dolphins haven't the slightest ambition to be secret agents.

SESSION 8

Begin by saying:

Our next Listening Skill Builder, called "Dandelion Wine," is from a book of the same name. Have you ever heard of dandelion wine? Can you imagine the taste of dandelions as you say the words to yourself, and imagine yourself drinking wine made from dandelions?

To the people in this selection, dandelion wine had a very special flavor. And the author, Ray Bradbury, has a very special way of describing that flavor. You are going to become aware of a kind of writing new to these Listening Skill Builder selections—writing that is full of what is called "imagery." Such writing brings forth all kinds of pictures, or images. "Dandelion Wine" is a good example of imagery in contemporary prose writing.

Listening Skill Builder 8

Dandelion Wine

And yet another harvest.

Grandfather stood on the wide front porch like a captain surveying the vast unmotioned calms of a season dead ahead. He questioned the wind and the untouchable sky and the lawn on which stood Douglas and Tom to question only him.

"Grandpa, are they ready? Now?"

Grandfather pinched his chin. "Five hundred, a thousand, two thousand easy. Yes, yes, a good supply. Pick 'em easy, pick 'em all. A dime for every sack delivered to the press!"

"Hey!"

The boys bent, smiling. They picked the golden flowers that flooded the world, dripped off lawns onto brick streets, tapped softly at crystal cellar windows, and agitated themselves so that on all sides lay the dazzle and glitter of molten sun.

"Every year," said Grandfather, "they run amuck; I let them. Pride of lions in the yard. Stare, and they burn a hole in your retina.

A common flower, a weed that no one sees, yes. But for us, a noble thing, the dandelion."

So, plucked carefully, in sacks, the dandelions were carried below. The cellar dark glowed with their arrival. The winepress stood open, cold. A rush of flowers warmed it. The press, replaced, its screw rotated, twirled by Grandfather, squeezed gently on the crop.

"There . . . so . . ."

The golden tide, the essence of this fine fair month ran, then gushed from the spout below to be crocked, skimmed of ferment, and bottled in clean ketchup shakers, then ranked in sparkling rows in cellar gloom.

Dandelion wine.

The words were summer on the tongue. The wine was summer caught and stoppered. And now that Douglas knew, he really knew he was alive, and moved turning through the world to touch and see it all, it was only right and proper that some of his new knowledge, some of this special vintage day would be sealed away for opening on a January day with snow falling fast and the sun unseen for weeks or months and perhaps some of the miracle by then forgotten and in need of renewal. Since this was going to be a summer of unguessed wonders, he wanted it all salvaged and labeled so that any time he wished, he might tiptoe down in this dank twilight and reach up his fingertips.

And there, row upon row, with the soft gleam of flowers opened at morning, with the light of this June sun glowing through a faint skin of dust, would stand the dandelion wine. Peer through it at the wintry day—the snow melted to grass, the trees were reinhabited with bird, leaf, and blossoms like a continent of butterflies breathing on the wind. And peering through, color sky from iron to blue.

Hold summer in your hand, pour summer in a glass, a tiny glass of course, the smallest tingling sip for children; change the season in your veins by raising glass to lip and tilting summer in.

"Ready, now, the rain barrel!"

Nothing else in the world would do but the pure waters which had been summoned from the lakes far away and the sweet fields of grassy dew on early morning, lifted to the open sky, carried in laundered clusters, nine hundred miles brushed with wind, electrified with high voltage, and condensed upon cool air. This water, falling, raining, gathered yet more of the heavens in its crystals. Taking something of the east wind and the west wind and the north wind and the south, the water made rain and the rain, within this hour of rituals, would be well on its way to wine.

Douglas ran with the dipper. He plunged it deep in the rain barrel. "Here we go!"

The water was silk in the cup; clear, faintly blue silk. It softened the lip and the throat and the heart, if drunk. This water must be carried in dipper and bucket to the cellar, there to be leavened in freshets, in mountain streams, upon the dandelion harvest.

Even Grandma, when snow was whirling fast, dizzying the world, blinding windows, stealing breath from gasping mouths, even Grandma, one day in February, would vanish to the cellar.

Above, in the vast house, there would be coughings, sneezings, wheezings, and groans, childish fevers, throats raw as butcher's meat, noses like bottled cherries, the stealthy microbe everywhere.

Then, rising from the cellar like a June goddess, Grandma would come, something hidden but obvious under her knitted shawl. This, carried to every miserable room upstairs-and-down, would be dispensed with aroma and clarity into neat glasses, to be swigged neatly. The medicines of another time, the balm of sun and idle August afternoons, the faintly heard sounds of ice wagons passing on brick avenues, the rush of silver skyrockets and the fountaining of lawn mowers moving through ant countries, all these, all these in a glass.

Yes, even Grandma, drawn to the cellar of winter for a June adventure, might stand alone and quietly, in secret conclave with her own soul and spirit, as did Grandfather and Father and Uncle Bert, or some of the boarders, communing with a last touch of a calendar long departed, with the picnics and the warm rains and the smell of fields of wheat and new popcorn and bending hay. Even Grandma, repeating and repeating the fine and golden words, even as they were said now in this moment when the flowers were dropped into the press, as they would be repeated every winter for all the white winters in time. Saying them over and over on the lips, like a smile, like a sudden patch of sunlight in the dark.

Dandelion wine. Dandelion wine. Dandelion wine.

From "Dandelion Wine" by Ray Bradbury. Copyright © 1953 by Gourmet; *renewed 1981 by Ray Bradbury. Reprinted by permission of Don Congdon Associates, Inc.*

HOW WELL DID YOU LISTEN?

1. **The boys liked dandelion picking because they**
   - **A** knew this proved that summer was ending
   - **B** thought dandelions were weeds
   - **C** enjoyed being part of the wine making
   - **D** wanted to get the job over with

2. **Grandfather made dandelion wine**
   - **A** every year
   - **B** only one year
   - **C** every few years
   - **D** more than once a year

3. **The effect of the wine came from the**
   - **A** alcohol in the wine
   - **B** drinker's imagination
   - **C** special wine-making process
   - **D** dandelions in the wine

4. **We can conclude that Grandma**
   - **A** was the only one allowed to get the wine
   - **B** saved the wine for the bitterest days
   - **C** disapproved of wine drinking
   - **D** disliked dandelion wine

5. **Which of these phrases does not bring to mind a vivid picture or image?**
   - **A** golden flowers dripped off lawns
   - **B** this was going to be a summer of unguessed wonders
   - **C** the water was silk in the cup; clear, faintly blue silk
   - **D** snow was whirling fast, dizzying the world, blinding windows

6. **The author's images suggest that both dandelions and dandelion wine have the qualities of**
   - **A** coolness and quietness
   - **B** wildness and strength
   - **C** darkness and mystery
   - **D** warmth and light

7. **The main point of this story is that**
   - **A** even worthless things can be made useful
   - **B** working together as a family is good
   - **C** memories can be stored and recalled
   - **D** summer is the most enjoyable season

SESSION 9

Begin by saying:

Our next Listening Skill Builder is called "Miracle Drugs from Tropical Rain Forests." How can miracle drugs be obtained from rain forests? Listen and evaluate the information presented in the selection.

Listening Skill Builder 9

Miracle Drugs from Tropical Rain Forests

Along the equator lie most of the earth's tropical rain forests, regions of dense vegetation that receive abundant rainfall and sunlight all year long. These excellent growing conditions result in the lush growth of an incredible variety of plants, trees, and vines. A single tree may shelter as many as 100 different kinds of plants—vines that curl upward around it, and other types of vegetation that live along its branches and its trunk. It is estimated that the tropical rain forests hold more than two-thirds of the earth's millions of species of plants and animals.

Due to the large number and wide variety of plants and animals in the rain forest, there is intense competition for food, sunlight, and water. Rain forest plants have evolved many chemical survival techniques. Their leaves may contain poisons that prevent insects from eating them or fungi from taking hold; their stems may produce chemicals that keep vines from twining around and strangling them; their roots may make substances that prohibit the growth of other plants nearby; their seeds may contain toxins that prevent animals from digesting them.

These potent chemical warfare techniques have proven invaluable to medical science. About a quarter of today's prescription drugs were originally developed from chemicals found in tropical rain forest plants. *Curare*, which is used as a muscle relaxant, is a plant toxin found in the leaves of some rain forest species. In recent years, *vincristine*, a drug derived from the rosy periwinkle, a plant of the rain forests of Madagascar, has been used with great success to treat certain cancers. The roots of the mandrake, also a rain forest plant, have been the source of a drug used to fight leukemia.

Cancer researchers are particularly interested in rain forest plants. They are sending teams of botanists to all the major rain forest regions to collect plant species for study and testing. Teams expect to bring back about two pounds each of 20,000 specimens, including leaves, roots, flowers, fruits, and stems. These materials will be carefully labeled, air-dried, and shipped to medical laboratories for processing.

Botantists assigned to the project expect to discover many unknown plant species. To aid them in their search for potentially valuable plants, they will enlist the aid of local tribes. Some useful plant substances are already known to native populations and they may be able to provide information that will point the plant collectors in the right direction. For example, curare has long been used as a powerful poison on arrow tips by the hunters of the rain forests.

Once the plant material has been dried and sent to the laboratory, chemical compounds will be separated and purified. Next, each substance will be tested on tumors growing in test tubes, a much more efficient and cheaper process than testing on mice. Any substance that hinders or halts tumor growth or kills tumor cells will be selected for further study.

Tropical rain forests have long been a source of miracle drugs and may contain many new ones, but today the earth's rain forests are endangered. Equatorial populations are growing, and the rain forests are being cleared at a rapid rate to make room for ranches, farms, cities, and highways; and to provide wood for construction projects as well as for export. The result will inevitably be the extinction of hundreds of thousands of species of plants, and also, potentially, the loss of many beneficial drugs.

Botanists hope that projects like the one in which plants are being collected for cancer tests will draw worldwide attention to the problem of the rain forests.

One botanist says that though these areas have the highest diversity of plants, they are

the most poorly studied. He believes that if botanists and other scientists do not work quickly, the forests may disappear before anyone learns about all they hold.

If the forests can be saved from encroaching society, the drugs discovered may help scientists in their search for cancer cures. At the same time, their discoveries may encourage governments to set aside large tracts of rain forest as storehouses of valuable substances. The same miracle drugs that save human lives may save the rain forests as well.

HOW WELL DID YOU LISTEN?

1. A single rain forest tree may shelter as many as

A 10 species of plants
B 100 species of plants
C 1,000 species of plants
D 10,000 species of plants

2. Why do rain forest plants contain so many potent chemical substances?

A They grow in extremely warm conditions.
B They must compete to survive.
C They are subjected to acid rain.
D They need them in order to grow to maturity.

3. Curare is a substance that

A is used to treat cancers
B was first discovered by botanists
C is derived from rain forest plants
D is used by the natives for medical purposes

4. Botantists will be searching the rain forests for plants that

A contain yet unknown cancer-fighting drugs
B can be planted inside the Northern Hemisphere
C are already used as medicines
D can be used as sources of food

5. Drugs will be tested on tumors in test tubes rather than on mice because

A it will be more efficient and cheaper
B it will give more accurate results
C mice would probably be unaffected by these extracts
D tumors are more easily destroyed when grown in test tubes

6. Rain forests are endangered chiefly by

A poachers who sell the plants
B the lumber industry
C the civilized world encroaching on the land
D weather that changes unpredictably

7. According to the selection, the tropical rain forests should be preserved in part because they

A are an important part of the world's community of plants and animals
B serve as home to many tribes
C play an important part in the world's water cycle
D may contain substances valuable to medical science

SESSION 10

Begin by saying:

Our last Listening Skill Builder is called "Where Do Diamonds Come From?" Did you know that those gorgeous, romantic stones many people dream about owning are mined just like such mundane substances as coal and iron? Listen carefully to the selection and you'll learn about the origin of diamonds, where diamonds are found, and some of the ways in which diamond miners harvest this precious gemstone.

Listening Skill Builder 10

Where Do Diamonds Come From?

Many millions of years ago, in layers of hot, fluid rock called magma deep within the earth, deposits of carbon crystallized into diamonds. Time passed, and the diamond-bearing magma was forced up toward the surface of the earth. Forming a thin column, it rose rapidly through surrounding rocks and spewed out explosively when it reached the earth's surface.

There, the magma cooled and hardened, becoming a volcano cone atop a buried column of rock.

Still more time passed. Wind, rain, flowing water, gravity—all of these weathering agents wore away at the volcano. Bits of rock and diamonds were washed downhill with every rainstorm, and eventually they were washed into streams and then into rivers. Some settled in the thick sediments on the river bottom. Others were carried downstream by the river current, bouncing along year after year, until they reached the mouth of the river. There, in the quiet coastal waters near the ocean, they settled.

At last, nothing was left of the volcano itself, for it had been entirely worn away. Only the root of the volcano, the underground diamond-bearing column of rock, remained as evidence that there had ever been a volcano.

This natural history of the origin and movement of diamonds is vital to the diamond industry, for it helps in the search for these valuable gemstones. Diamond prospectors look for the buried rock column, which they call a *pipe*, and they look for *kimberlite*, the special bluish diamond-bearing rock.

When a kimberlite pipe is mined, the job at first is straightforward. It is just a matter of digging up surface kimberlite, so open-pit mining methods can be used. This means that no digging is needed. Drills and bulldozers are used to turn the kimberlite into rubble, which is then loaded aboard trucks and taken away to be processed.

As more and more kimberlite is trucked away, a depression gradually forms in the top of the pipe. The depression becomes deeper and deeper as the ground is cut away in terraces called *benches*. Finally, it is too deep and its walls are too steep for open-pit methods, and the miners must go underground.

Now a shaft is dropped a thousand feet or more into the surrounding rock. The shaft is parallel to the vertical kimberlite pipe, and from this parallel shaft, horizontal tunnels are drilled and blasted into the blue rock. Then, after reinforcing the tunnels for strength, the miners use a process called *block-caving*. They leave unreinforced spots, called *draw points*, in the roofs of the tunnels, then blast upward again through the draw points and hollow out caves over them. The ground above the caves collapses into the draw points and falls downward through them into the tunnel. The ground, which is mainly kimberlite, is then loaded onto trucks and hauled away. Block-caving continues at each location until no more kimberlite falls through a draw point.

Kimberlite pipes have been found in Africa, Australia, South America, and the Soviet Union. Several hundred have been discovered in Siberia, the coldest, most northern part of the Soviet Union. The richest of these pipes have been mined using the open-pit method, under conditions so harsh that miners get premium pay. Because the ground never thaws more than a few feet even in the short Siberian summer, it must be warmed before explosives can be placed. Working in the terrible cold, in temperatures so low that rubber becomes brittle enough to shatter, workers struggle to extract the precious diamonds from the frozen ground.

Kimberlite pipes are one source of diamonds. There are others—riverbeds, into which diamonds were washed when diamond-bearing volcanoes eroded; and beaches at the

mouths of rivers, where rivers dumped their tons of sediment before emptying into the ocean.

The mining of riverbeds is easier if the river is dry, or if it can be diverted to take a different path temporarily. Thick diamond-bearing sediments that line the floor and walls of the river are dug out and hauled away to be processed.

The sorting process is a crucial and difficult part of the mining of diamonds. Every year, diamond miners move and process millions of tons of rubble—in which only a relatively few gemstones may be found.

As a first step in the processing operation, kimberlite from a pipe mine is crushed. (Sediments from a river bed or bedrock from a river mouth need not be crushed, because the rock has already been broken down by the forces of nature.) All loose material is washed and screened to separate the diamonds and heavier minerals from the lighter particles.

Finally, the diamonds are separated from the waste. This is done by using one of two techniques. One technique is to wash the material over a greased plate in a stream of water. Diamonds cannot be wetted and so stick to the grease, while the waste material runs off in the water. The other technique is to X-ray the diamonds because diamonds glow when exposed to radiation. The material to be sorted is sent along a conveyor belt under X-ray radiation. A sensor then picks up the glow from each diamond, setting off a second device that emits a brief burst of air, blowing the diamond off the conveyor belt into a collector.

The job, however, is still far from over. Now the diamonds must be sorted again into two groups—those stones suitable for jewelry and the less attractive stones. Most of the diamonds are of the latter type; greasy-looking, dark-gray spheres. These are called industrial-grade diamonds and they will be sold for use in abrasives or in high-tech electronic devices.

Gem-quality diamonds include both colored stones, called *fancies*, and the more familiar colorless stones. They range in size from pinheads to large marbles. Really large gem-quality stones are extremely rare; the largest one ever found, the Cullinan diamond, was about the size of a baseball.

Large or small, the diamond is the most precious of all the gemstones, and diamond mining is the ultimate challenge. From its fiery origins miles inside the earth to the moment when it is plucked from among mountains of waste a diamond's story is one of adventure.

HOW WELL DID YOU LISTEN?

1. The natural history of the origin of diamonds is important to the diamond industry because it helps in

A finding diamonds
B mining diamonds
C separating diamonds from waste
D determining the value of specific stones

2. Open-pit diamond mining must eventually give way to tunneling operations because

A diamonds become rarer at greater depths
B a pit becomes too deep and too steep
C open-pit mining is more expensive than tunneling
D kimberlite becomes harder to find at greater depths

3. **In block-caving, kimberlite falls down through holes in the tunnels called**

   A pipes
   B terraces
   C block caves
   D draw points

4. **According to the selection, kimberlite pipes have been found in**

   A South America only
   B the Soviet Union only
   C Africa only
   D all of the above

5. **Diamond mines are often located in**

   A volcanos
   B lake bottoms
   C river bottoms
   D mountainsides

6. **Separating diamonds from waste material is a difficult part of the mining process because**

   A an enormous amount of material must be processed
   B there is always the danger of crushing a diamond
   C industrial and gem-quality diamonds are mixed together
   D the work must be done slowly and carefully by hand

7. **X-rays can be used to separate diamonds from waste because under X-ray radiation diamonds**

   A float
   B glow
   C become magnetic
   D stick to a greased plate

APPENDIX C: LISTENING-NOTETAKING SKILL BUILDER SESSIONS

SESSION 1

As you read the demonstration Listening-Notetaking Skill Builder below, you will make notes on the board. For your convenience, notes that might be made are interjected parenthetically in boldface where it will be appropriate to pause and write them. The material also includes an explanatory follow-up, which you may read verbatim or paraphrase.

You will want to leave wide spaces on the board between notes so that you can insert additions and make revisions in a manner as close as possible to the way students will be taught to revise their notes. Completed model notes for this material, showing revisions, appear on pages 71 and 72.

At the start of the session, put the title "Lecture Notes" on the board.

Tell the class that they are going to begin to learn how to take lecture notes; explain what you are about to do. Direct the class to pay close attention to the points you choose to note on the board.

Demonstration Listening-Notetaking Skill Builder

Lecture Notes

Some of you have already learned to take notes on written material. When you write a paper or report, you know that you will have to return your source books to the library. However, the notes that you have taken belong to you; you can refer to them whenever you like. *Lecture* notes are taken for the same reason: they give you a permanent record, so that you can review the lecture months or years later. (*Write on board:* **Why? permanent record**)

In junior and senior high school, you will often want to take notes on material discussed in class. Students who go on to college will find that they have to take lecture notes in every class. A college student is not only expected to know the information in his text; he is held responsible for any information given during a class lecture. The notes he takes on lectures and on the material he reads are his best source of review for an examination. **(review for exams)**

The ability to take good notes is valuable on the job too. Almost every man and woman in the working world has to attend meetings, and sometimes classes, for advanced training on the job. Taking notes is the best way to absorb the information accurately on the spot. **(work—meetings, training)**

I am not talking now of taking dictation. **(not dictation)** When people take dictation, they write down every word. In taking notes, you write only the *main points,* and the *important details* that back them up. **(main points, important details)** It's important to get all the basic ideas, but you write only *short, skeleton phrases*: nouns, verbs, and a few important adjectives. **(short phrases)** Right now I am spelling out all words, but as you become used to notetaking you will abbreviate common words and find your own shortcuts. Right now the chief thing is selecting the points that are important enough to write down. **(important points)** You will notice that all main points start at the margin, and details are indented under them. **(start at margin, indent details)** However, don't worry too much about where to put what you write; you can rearrange your notes later.

When you take lecture notes, you use the better-listening formula, TQLR. **(use TQLR)**

You *tune in* when you hear the title and the introduction. **(T—introduction, title)** You *question* the speaker's purpose and approach as he speaks. **(Q—purpose, approach)** You *listen* until a point strikes you as being important, and then you write. **(L—before writing)** By the way, you also listen for clues from the speaker's voice. Most lecturers will emphasize important words and pause to let them sink in. Listen for transition words—words like *but, however, on the other hand.* Listen, too, for key phrases such as "There are several reasons why . . ." or "In the first place . . ." Phrases like these tell a notetaker that something is coming that is worth jotting down. **(clues—voice, words and phrases)** Pay especially close attention to *introductions* and *summaries,* which often repeat the main points for you. **(introduction,summaries)** All of this will become clearer with a little practice.

Either read or paraphrase:

Now the lecture is over. The first thing to do is go over the notes and revise them for permanent reference. This is very important; the little extra effort it takes makes all the difference between time *saved* by taking notes in the first place, and time wasted. If you wait too long, you will have forgotten what was said, and you won't be able to see whether your notes give a true picture of the lecture. You may even forget what some of your hasty abbreviations mean.

Before revising, always read through what you've written down, mentally filling in the blanks as you read. This helps you see which points should be expanded, which should be combined with others, and which can be eliminated altogether. A revision should contain a logical sequence of main points and supporting details.

This is where the *review* part of TQLR comes into notetaking. Before you revise, you review and evaluate what you've listened to. So while we're at it, let's add that to the notes under TQLR. **(R—evaluate before revising)**

Let's see what we have here. *(Read the key phrases aloud.)* First of all, the word *why* does not say enough by itself to remind you of what it stands for. It would be better to say "Why take notes?" We see that the reasons for taking notes fall into two groups: school and work. Let's make those two categories subpoints under the main question, and put the reasons in their proper places, indented still farther:

Why take notes?
  School
    permanent record
    review for exams
  Work
    meetings, training

The next four items are not related to the reason for taking notes. What would be a good head to group them under? *(Ask for suggestions from the class as to what the phrases have in common.)* "How to take notes" would be a good main head. "Technique" is even shorter, and says the same thing. Now, do we need all of these items under it? It will say just as much if we write:

Technique
  main points and details *only*
  short phrases
  start at margin, indent details

Now we come to the next main head—"Use TQLR." This looks pretty clear just as it stands, doesn't it?

Original Notes

Why? permanent record
  review for exams
  work—meetings, training

Not dictation
  main points, important details
  short phrases
  important points
  start at margin, indent details

Use TQLR
  T—introduction, title
  Q—purpose, approach
  L—before writing
    clues—voice, words and phrases
    introductions, summaries
  R—evaluate before revising

Revised Notes

Why take notes?
  School
    permanent record
    review for exams

Work
meetings, training

Technique
main points, important details *only*
short phrases
start at margin, indent details

Use TQLR
T—introduction, title
Q—purpose, approach
L—before writing
clues—voice, words and phrases
introductions, summaries
R—evaluate before revising

This is an illustration of how you will want to look over and revise your notes as soon as you have taken them. Once you have grasped the idea and have had some practice, you will do many of these things as you take the notes the first time, and your notes will be more complete.

Have students copy the revised notes on page 86 of their Student Record Books and study them. Let them help you word a brief summary—no more than three sentences. Write the summary on the blackboard and have students copy it below their notes. A sample summary might run like this: "Notes are valuable in school and at work. They should contain only important points and details. TQLR helps you to take notes on the right things."

Now prepare the class for their first brief exercise in taking notes. They will work in their Student Record Books. Tell them to leave a margin on the left, plus plenty of space for additions between notes.* Tell them to head the notes with the title of the lecture, "Notetaking," and the name of the class. Point out that erasing takes too much time; if students use ink instead of pencil, it may help them remember to cross out instead of erasing.

The lecture is printed here with expression marks for the teacher's benefit in delivering it.

Listening-Notetaking Skill Builder 1

Notetaking

There are several problems in taking notes. // *What* to write. / How to write it. / How to *use* the notes you have taken. //

Notetaking is valuable, but it is not easy. / It requires much practice. / It cannot be graded, / because no two people take notes exactly alike. / But notes can be tested. / The test of good notes is whether the notetaker can understand and use them even long after they were made. //

When everyone has finished writing and revising, ask for volunteers to read their notes or to put them on the board. Students should recognize the differences among their notes and comment on them. Good revised notes for this lecture might read as follows:

Problems in notetaking
1. what to write
2. how to write it
3. how to use notes

Valuable but not easy
much practice
can't be graded (all different)
can be tested (by later use)

Summary: There are several problems in notetaking, but it is a valuable skill. It requires much practice, and everybody's notes are different. If notes are usable after a long time, they are good.

When students have agreed on a generally acceptable note form and summary, have them write both in their Student Record Books.

*Notetaking pages in the Student Record Books contain two unconnected dots that permit students to visualize a wide left-hand margin. These may be connected by a hand-drawn line if the student wishes. In the margin area, students may wish to jot sketches, problems, or illustrative remarks the teacher may make during a lecture. The space should also be used to note the student's own conclusions, which will eventually appear in his summary.

SESSION 2

It is well to use the first part of the session to demonstrate the value of notetaking. To do this, start by having students orally review the ideas expressed in either or both of the previous day's lectures before looking at their Student Record Books. As the points are volunteered, you might wish to write on the board the main ideas and supporting details, or have a student do so.

Pass out the Student Record Books and have students open them to page 86. Have students compare their recall with and without notes. While a few students may demonstrate a fair recall before consulting the notes, this exercise will dramatize for most of them the indispensability of notes for satisfactory review of material.

Before presenting Listening-Notetaking Skill Builder 2, you may wish to remind the class of such points as leaving a wide margin on the left and leaving space between notes for comments and changes.

Remind students not to write anything until a point has taken shape in their minds. Assure them that although they may miss a point or two, they need not be overly concerned. Learning to take notes is a long process, and progress is slow.

Have the Rate Builder key booklets passed out, and prepare students for Listening-Notetaking Skill Builder 2.

This lecture is substantially longer than the first. It is designed to afford practice in isolating main points from supporting ones and in eliminating unnecessary details. Begin your lecture by saying:

> Perhaps you're a science-fiction fan, / or maybe you like your science straight. But often, / taking a science-fiction viewpoint can help us understand a thing better than a mere description of it. / The title of this lecture will be / "The Earth's Interior." / For the next few minutes / I'm going to take you on an imaginary ride inside a huge drill. //

Listening-Notetaking Skill Builder 2

The Earth's Interior

Let's imagine for a moment that we are aboard an inner-space vehicle, / boring our way four thousand miles toward the center of the earth. / From a glass window in the wall of this drill, / we shall be able to look out at the multicolored rock, mud, and metal through which we shall be passing. / And now, down we go! //

After we are about a half mile below the surface of the earth, / we take a reading on our instruments and notice that it is much hotter than when we started. // Another half mile down, it is still hotter. / This is not strange; / for every mile we go down, / the temperature goes up eighty degrees Fahrenheit. // Fortunately for us, / our drill is well insulated and air-conditioned, / for by the time we have traveled down three miles, / the temperature outside will be hotter than boiling water. // When we have reached a depth of fifty miles, / the temperature will be about four thousand degrees. //

Now let's take note of the composition of the material through which we are passing. // Straight down, hour after hour, all we see is rocky walls of many different colors. / Some are rich in iron and platinum. / In others we see diamonds mixed with a great many other minerals. / But it is all solid, rocklike stuff. //

Day after day, we keep moving toward the center of the earth. / We see changes taking place in the walls. / As they become hotter, they melt into a pasty mass / —a kind of mud made of iron and nickel. //

It won't be long now until we reach the actual center of the earth. / It will be in a liquid stage and boiling like a kettle of molasses candy. / It will be an ocean of boiling metal / —a sea of molten iron and nickel. / It will be so hot that anyone coming within ten miles of it would be burned to a crisp in

less than two seconds. / Even the thick walls of our drill would melt and dissolve in it. //

You might say that just now we're somewhat in a spot, / but since this is science fiction, / we'll push the "up" button just in the nick of time / and get back to the cool surface of the earth. / Inner space is just not for us. //

Adaptation of pages 19-29 from PICTURE BOOK OF THE EARTH *by Jerome S. Meyer. Copyright © 1949 by Lothrop, Lee & Shepard Co., Inc.*

Give students three or four minutes to revise their notes. Have them write a summary containing the main ideas. Point out that the summary is not based on one's memory of the lecture, but on the notes, which should contain *whatever is worth remembering.*

Have students open their key booklets to pages 6 – 7 and compare their notes and summaries with the model notes. Discuss the items that should not have been included as well as those that should have been. Explain that some descriptive passages and "word pictures" are not main points and must be omitted.

It is a good idea to have the students exchange their notes, reminding them that this is a learning experience. By seeing how others take notes, they will see the good and bad points of their own notes more clearly.

SESSION 3

Begin your lecture by saying:

We've already seen / that a good set of notes is like a key to the storehouse of memory. / Your notes help you recall things you want to remember. / As you learn more about taking and using notes / you'll see how a few well-chosen words will help you later / in recalling many more things than you wrote down. // But there are still other values to notetaking / —more than meet the eye at first glance. So let's take a second look. / In this lecture we will explore more of the reasons for taking notes in class. / We will title the lecture / "Why Take Notes?"//

Listening-Notetaking Skill Builder 3

Why Take Notes?

Students are encouraged to take notes in school in order to learn. / You may be surprised to find that taking notes on a subject can make you more interested in it. // You see, / when you take notes, you pay close attention to the material being covered in the lecture. / When you pay more attention to something, you increase your knowledge about it. / And knowledge can help to build interest. //

Interest, in turn, can help you learn things faster and more thoroughly. / The logic of this is easily demonstrated if you think of women's traditional lack of interest in big-league sports. / Unlike men, who are brought up to enjoy baseball and football, / women often care little about either one and therefore never really learn about them. / But women, / brought up to enjoy playing with dolls, / learn a lot about homes and babies. //

A second, more obvious reason for good notetaking / has to do with the immediate value of notes. / One of the facts of life in school is the taking of examinations. / When the time comes for review before an exam, / good notes are valuable. / They help you organize the material covered in the course. / And they enable you to spot the major questions that are likely to be asked in the test. / In many courses your examinations will come from both your textbook materials and the information given during class. / A good set of notes can tie up knowledge from both of these sources. //

But there are longer-range benefits in good notetaking. / You cannot and should not try to remember all the main points and details of a lecture. / But writing them down will reinforce them in your mind. / Even years later, / something you hear or something you see / can cause your mind to leap back and

remember an idea or a fact that you once heard and wrote down. / Suddenly the fact or idea becomes clearer than ever before. / And your understanding of an old idea may throw light on the problem you are dealing with at the moment. / Taking notes is like maintaining a file cabinet of information into which your mind dips throughout your life. / Taking notes will help you keep your store of knowledge in an organized, usable way, / for school use and for use throughout your lifetime. //

Give the students a few minutes to revise their notes and summarize them in their record books. Then have them turn to page 8 in the key booklets and compare their work with the model.

This is a good time to explain the function of the model notes, particularly if any of your students are uneasy because their notes are different from those in the booklet. Ask them why they think the notes are called models rather than keys. As the term has been used in the lab, a key deals with right answers and wrong answers. The model notes, on the other hand, are examples of satisfactory notes. Students' notes need not be exactly like the models. So long as they are adequate and useful, and not full of unnecessary details, they will be satisfactory.

Now prepare the class for a second brief lecture. Begin by saying:

> Now that you have an idea of *why* to take notes, let's talk some more about how to take *good* notes. We'll call this lecture "Revising Notes."

Listening-Notetaking Skill Builder 4

Revising Notes

Good notes consist mostly of main ideas and key details that support the main ideas. Good notes are also short notes, but they are not skimpy ones. If you take too many notes, you will be so busy writing that you will not be able to listen to what is being said. On the other hand, notes that are too skimpy put too much of a burden on your memory.

Good notes are usually revised notes. No matter how good a listener or notetaker you are, your original notes are bound to be jumbled. Most speeches are informal. They are not designed to fall neatly into main points, subpoints, and so on. A speaker may refer to something he has said before, and the listener can't waste time going back to look for the right place to insert the new information.

Therefore, if there is no time in class to rework your notes, the sooner after class you can go over them, the easier and more quickly accomplished the revision will be. The material ought to be as fresh in your mind as possible. There may be omissions in your notes that you can fill in from memory if you do not wait until the clues are meaningless. Your abbreviations and symbols may become unclear unless you spell them out immediately. This revision of your notes may seem a nuisance, but it can be done quickly, and it has real value for the following reasons:

1. You clear up points you may not have understood. As you rearrange your notes you are forced to think them through. By so doing, a new or complicated idea may become clear.
2. You fix the material more firmly in your mind for future use.
3. You have a good, usable record for later reference and review.

Here are some suggestions for revising your notes. First, reread what you've written, to see that it is in logical order and makes sense. Cross out any incidentals, even though they seemed important when spoken. Underline main points, or draw attention to them in some way. Next, rework your notes where necessary to arrange the material in good note form. Your object is to bring together under each main point *all the material that belongs together.*

If there was class discussion after the lecture, work this information into your revision

where it logically belongs. Then summarize briefly what you feel are the important points of the notes.

This summary can be very important. Sometimes it will include points that are not precisely stated in your notes but are conclusions you have made from what *was* said. Use your own phrases in place of the speaker's words. This is a check on your understanding of the subject, and tends to fix it more firmly in your mind.

Your organized notes should be a neat, permanent record of the class. If they are *clear, simple,* and *brief,* you will be delighted with the ease and speed with which you can review them when the time comes.

Follow previously suggested procedures for evaluating and discussing students' notes.

Students should now be ready to begin abbreviating words as they take notes. Review some of the common abbreviations and symbols.

Suggest that students be careful to include in all lecture notes any names, dates, or other data that seem relevant. New words—especially those of which students are unsure—should be jotted down. It is a good idea to circle such words. Spellings and meanings can be checked during the process of revision, and the new words and definitions can be added at the bottom of the revised notes.

SESSION 4

Begin the lecture by saying:

In today's lecture you will hear facts and figures about improved safety on modern-day highways. As you listen and take notes, try to evaluate these facts. Draw your own conclusions about what factors have brought about a lower accident and death toll, and whether or not this trend will continue into the future.

Listening-Notetaking Skill Builder 5

Cutting the Accident Toll

In 1985 there were an astonishing nineteen million motor-vehicle accidents in the United States, resulting in 45,600 deaths. These statistics represent a terrible toll in human suffering and property loss, yet they also represent a dramatic improvement in traffic safety. Based on deaths per total miles driven, the 1985 death rate is the lowest on record. In 1985, 2.58 people died for each one hundred million miles driven. Compare that to 1925, with 17 deaths per 100 million miles, or 1965, with 5 deaths per 100 million miles.

In fact, traffic fatalities per miles driven is a statistic that has come down steadily since this information was first published in 1925.

Why? What accounts for this steady improvement, particularly in recent years?

There are really two answers to this question: reduction of the severity of accidents and improved chances for survival when an accident does occur.

Reducing the rate of serious accidents and improving an accident victim's chances for survival depend on changes in three factors: the road, the car, and the driver. Anything done to improve the safety of one of these factors will reduce traffic deaths.

Highway engineers are working constantly to design better and safer roads. Superhighways have improved safety along heavily traveled routes. Median strips separate opposing streams of traffic and there are more lanes for traffic. Shoulders are wide and paved, providing a safe place for disabled vehicles to park and a margin of safety for cars that drift off the edge of the highway. Highway planners have eliminated most roadside obstructions and introduced landscaping features that improve safety conditions. For instance, thickets of wild roses not only beautify the highway, but also cushion the impact of cars

that swerve off the highway. Superhighways have controlled access—vehicles are able to enter the highway only at specific interchanges. These interchanges are scientifically planned so that cars will reach highway speeds by the time they become part of the traffic stream.

Auto manufacturers have been giving more and more attention to the problem of providing better and safer automobiles. Modern cars have more windows for better visibility, bigger and better brakes, improved acceleration, padded steering wheels and dashboards, seat belts and shoulder harnesses, and greatly improved headlights, back lights, and directional signals.

The government sets standards for automobiles. For example, a braking system must be able to stop a car traveling sixty miles per hour in not more than 456 feet. Side doors must not open in a collision, all glass must be shatterproof, and the steering wheel must collapse or absorb some of the impact in a crash.

Motor vehicle maintenance also influences safety. Drivers must keep their cars in good repair, making certain that brakes, tires, lights, and steering are operating correctly. Some states require a yearly motor vehicle inspection. All states have passed regulations regarding condition, and many states carry out spot checks to detect unsafe vehicles.

Much has been done to improve the safety of the highway and the automobile. What about the driver?

Improper driving is frequently a factor in traffic accidents. Speeding, for example, continues to be a major cause of accidents. In 1985, about one quarter of highway deaths involved vehicles that were being driven too fast for conditions. Bad weather or heavy traffic require a driver to slow down for safety. Fortunately, more drivers seem to be doing so.

A lowering of the speed limit in 1974 is also responsible for a lower highway death rate. As a response to an oil-shortage crisis, a law was passed setting a nationwide speed limit of 55 miles per hour. According to the National Safety Council, this law saved about four thousand lives per year while it was in effect.

More and more states have passed seat-belt laws requiring the use of shoulder harnesses and seat belts, and every state now has a law requiring that small children be protected by child restraint devices. In television, radio, and magazine advertisements, drivers and passengers are urged to buckle up for safety—a measure that, according to recent studies, is paying off.

Drinking has been shown to be an important cause of fatalities. Data shows that in 1985 alcohol was a factor in more than twenty thousand traffic deaths. In a recent study of over one thousand California drivers killed in automobile accidents, 65 percent had been drinking. Stiffer penalties for drunk driving and greater public awareness of the dangers of drinking and driving are starting to show positive results. Many states have passed laws raising the drinking age to 21, recognizing that the combination of alcohol and inexperience account for many auto accidents involving young people. In every case, fatal accidents declined among the youths affected by the law.

Will the downward trend of highway fatalities continue? With steadily improving roads and vehicles, and a continuing emphasis on better driving practices, it seems likely that the answer is yes.

SESSION 5

Begin the lecture by saying:

Today's Listening-Notetaking Skill Builder is about a familiar subject—money. All of you have used money, but do you know *what* money is and *why* it is used? As you take notes on the lecture, listen to learn the answers to these questions.

Listening-Notetaking Skill Builder 6

Money—Old and New

A shell, a cow, and a dollar bill—what do these things have in common? Surprising as it may sound, at different times and in different places, these things have served as money.

There are now about thirty-five thousand different varieties of money in the world. Throughout the ages an astounding variety of objects have served as money. Among these are items such as elephants, nails, hatchets, rice, and the jawbones of pigs. One South Pacific tribe used stone money so heavy that it took two men to roll each "coin" from owner to owner. In nineteenth century Borneo, human skulls were the standard for the economy.

Although all these items were used as money, some were far more efficient than others. To understand why, let's examine the qualities an item must have if it is to serve well as money.

First—and most important—everyone must accept the item's worth. It may have value because it is a useful object—like a cow, which may be eaten or milked. Or it may be valuable because it is beautiful or ornamental—like a shell, or gold, or a jewel. It may, of course, be both. A fur pelt, for instance, can be worn for both warmth and decoration. In most simple societies, money was a useful thing. As time went on, it was more often a decorative one.

Whatever is used for money should also be easy to carry about. Obviously stone money does not fill this requirement very well. Cows are perhaps a little more efficient in this respect, since they can propel themselves. Fur pelts are relatively easy to transport, but gold is even more convenient.

A third essential of efficient money is that it be easy to divide up. Again, stone money does not fill this requirement satisfactorily. A cow might—if you wished to divide its meat or milk. A fur pelt can of course be divided into halves or quarters, but if you sew it together again, it will be neither as useful nor as beautiful as before. Pure gold, however, can easily be divided into pieces and then hammered again into a single lump.

A fourth quality money should have is durability—it should be lasting. This is one characteristic stone money does have. Cows have it to a degree—they will live for ten or more years. Fur pelts retain their value even longer, although eventually they too deteriorate. Gold, however, will retain its original value century after century. It will not rust away, dissolve, or burn.

There is one more quality an item used as money should have: there should be a limited supply of it. Leaves may be beautiful, easy to carry about, easy to divide up, and even durable, but they will never serve as money as long as anyone can collect a limitless supply at any time. On the other hand, stones of a rounded shape, cows, fur pelts, and gold exist in limited supply and therefore can be used as money.

We have seen that there are several qualities an efficient form of money *should* have, and that not all money has all of these qualities. Perhaps you noticed that gold seemed to meet each qualification well. For that reason, gold became an almost worldwide form of money. People carried gold about and used it to pay for what they needed.

Today in the United States, the money system has become much more complex. It is based on a gold standard, but the money that is actually used is paper bills, or coins composed of other metals.

Do these paper bills and coins fill the qualifications money should have? What about worth? A dollar, for example, has very little value in itself, for it is only paper and ink. Its value lies in the fact that it can be exchanged for precious metal stored by the United States government. So it does have

worth. Furthermore, bills and coins can be easily carried about and easily divided up. They are durable, because the government constantly replaces those that are worn. Finally, they are in limited supply, for the government issues only a carefully controlled amount. U.S. bills and coins, therefore, are almost literally "as good as gold."

Why, you may be wondering, is it necessary to have money at all? The answer is: convenience. Money is convenient because, first and foremost, money serves as a medium of exchange—it is a handy way to buy and sell. Unless there were some form of money, a man who wanted to sell an ax and buy a saw would have to wait until he found a man who wanted to sell a saw and buy an ax. In a very simple society this kind of direct trading, or barter, is possible. But our society is far more complex. We do not buy and sell goods only. A man may sell his time, his skill, even something as intangible as an idea. By exchanging these services for money, he can then exchange the money for goods—or for other people's services.

Money serves as a measure of value when it is used as a means of exchange. Five dollars, for instance, can express the value of a dinner, a book, a tankful of gasoline, or two hours of a man's labor. Using money to measure the value of goods or services makes it far more convenient to exchange them.

Money is convenient in yet a third way—as a means of storing up value, or saving. A man's time cannot be stored. Most goods deteriorate—some of them, such as food, very rapidly. Since money has to be quite durable, it can usually be stored for later use without losing value.

It is apparent that money—whether it is gold, or cows, or colored shells—is a useful tool of society. The more efficient a tool it is, the more smoothly and efficiently a society can operate. A society that bases its monetary system on gold is likely to be far more efficient than one that bases its monetary system on coconuts, as some South Pacific societies do. Their money may grow on trees, but their way of life is as primitive as their currency.

SESSION 6

Begin your lecture by saying:

Today's Listening-Notetaking Skill Builder is typical of a lecture you might hear in history class. It deals with the Mexican War. Like many events in history, the Mexican War had more than one cause, and led to more than one result. As you take notes, pay special attention to the cause-and-effect relationships between the events discussed.

Listening-Notetaking Skill Builder 7

The Mexican War

The Mexican War was a bitter struggle between the United States and Mexico that occurred more than a century ago. As is true of most wars, this war was a result of several factors. We cannot point to any one factor and say "This is why the war was fought." We must look at the total picture.

One of the most important factors that led to the war was the bitterness that surrounded the annexation of Texas. Until 1836 Texas had been a part of Mexico. But in 1836 Texas revolted against the Mexican dictator, General Santa Anna, and proclaimed itself an independent republic. The United States, France, England, and other countries recognized the independence of the young republic, but Mexico steadfastly refused to do so.

Nine years later, when the citizens of the Republic of Texas were preparing to join the United States, Mexico warned the United States that any attempt to annex Texas would result in war. Despite this threat, preparations continued, and Texas became the twenty-

eighth state of the Union on December 29, 1845.

There was no immediate violence in spite of Mexico's threat. But the Mexican government did protest the annexation, and it broke off diplomatic relations with the United States. It seemed that war had been avoided. Nevertheless a powerful feeling of bitterness remained between the two nations.

Another factor that contributed to the eventual outbreak of war between Mexico and the United States was the dispute over the boundaries of the new state of Texas. Texans had long claimed that the Rio Grande formed the western boundary of their territory. Mexico, on the other hand, insisted that the boundary was the Nueces—*N-u-e-c-e-s*—River, roughly a hundred miles east of the Rio Grande. Both sides clung stubbornly to their positions. It seemed that force would be needed to settle the issue.

A third cause for disagreement between the two nations was the question of compensation. The Mexican government had been in a state of upheaval for some time: one revolution after another had occurred. Many American citizens had lost valuable property during these revolutions. They asked payment for their losses, but the Mexican government refused to settle many of the claims. The American government protested, but without success. Any of these three situations could have caused war, but up to this point there was no actual violence.

Two separate incidents led to the actual outbreak of hostilities. The first was the unsuccessful mission of a diplomat from the United States. President James Polk sent a representative to Mexico City in 1845. His mission was to make a peaceable settlement with the Mexican government. The United States offered to pay Mexico twenty-five million dollars and cancel all claims for compensation if Mexico would sell California and New Mexico to the United States and agree to the Rio Grande as the Texas boundary. The mission failed: the Mexican government refused to see the United States representative. Naturally this incident resulted in ill feeling.

The second incident was an actual clash between two small bands of troops. This clash took place on April 25, 1846. American forces had marched across the disputed Texas territory to the banks of the Rio Grande. Mexican forces, waiting on the other side of the river, crossed over and fighting began. When news of the battle reached the United States, it created a great deal of resentment, and on May 14, 1846, Congress declared war against Mexico.

The Mexican forces fought bravely against the well-organized American armies, but they could not match the superior equipment and military tactics of their northern neighbor. One American victory followed another.

It was nearly two years later, on February 2, 1848, that the Treaty of Guadalupe Hidalgo —*G-u-a-d-a-l-u-p-e H-i-d-a-l-g-o*—was signed. Hostilities were ended. Under the provisions of the treaty, the United States gained almost 525,000 square miles of territory. In addition to the disputed Texas territory, the United States received the two prized Mexican possessions—California and New Mexico. But the treaty was not one-sided. Mexico received fifteen million dollars from the United States as payment for her territorial losses. In addition, the United States agreed to cancel all claims for compensation against the Mexican government.

Let's review again the background of the Mexican War. As was mentioned, the causes included bitterness over the annexation of Texas, dispute over the Texas boundary, and disagreement on the question of compensation. But there was another factor—a very significant one. This was the growing feeling among Americans that the United States should extend westward to the sea. Some Americans even believed that the United

States had a duty to conquer and rule all North America. The American desire to expand westward undoubtedly influenced the decision to fight. War was actually declared after two key incidents occurred: (1) the Mexican government's refusal to listen to a settlement proposal and (2) the brief battle between American and Mexican forces at the Rio Grande.

After two years of conflict the Treaty of Guadalupe Hidalgo restored peace. The United States received the territory she wanted, and Mexico received a sum of money in payment for her land losses.

SESSION 7

Begin the lecture by saying:

Today's Listening-Notetaking Skill Builder concerns itself with a group of people—the American Tories—who could be called the forgotten people of the American Revolution. The Tories were Americans who remained loyal to the British king during the crisis in the colonies. Listen carefully as you take notes, and when we have finished the lecture, see whether you can understand both the British and the American point of view.

Listening-Notetaking Skill Builder 8

The Loyal Losers

The Tories—the colonials who remained loyal to Britain—probably benefited least from the American Revolution. They belonged neither to Britain nor to the newly formed United States of America. Although the British thought them loyal subjects, the Americans considered them traitors.

According to one estimate, about one-third of the colonists in 1776 were loyalists. They were not a clearly defined group; they could be found in every walk of life. Frequently, however, they were among the aristocracy, or the ruling classes. Actually, there were five identifiable groups of Tories. These were: the official class—men who held positions in the king's civil, military, and naval services; the professional class—lawyers, physicians, teachers, and clergymen; the landed class and their tenants; the wealthy commercial class of the colonial cities of New York, Albany, Philadelphia, Baltimore, and Charleston; and lastly, those whose political views were naturally conservative.

All these Tories could be classified into two major groups. On the one hand were the extremists who believed in unquestioning obedience to the British crown. On the other hand were the moderate majority. The latter often disapproved of the British colonial policies, but they disliked the aggressive tone of certain American leaders who sought to gain independence through armed revolt even more than they disliked the unpopular British policies.

Why did these men remain loyal to Britain while their contemporaries clamored for a new union? The Tories' reasons for remaining loyal are difficult to define. Generally economic factors were involved, for a man's financial security often overshadows his political ideals. For instance, many tobacco plantation owners of Virginia remained loyal simply because the British were large tobacco consumers. If relations with Britain were broken, where would they sell their tobacco? Furthermore, these men needed the low-cost manufactured goods produced in England. American-produced goods of the time were of poor quality, and they were extremely expensive. The New England timber merchant also wanted to maintain trade with Britain. The British navy was the world's largest buyer of timber, which it used for masts and spars.

For many Tories, however, there was something more than financial gain at stake. It was the principle of individual liberty—the principle that led many of the colonists to

revolt. For the revolutionists, individual liberty meant freedom from British rule. For the Tories, individual liberty meant freedom to be loyal to their king. They too fought in support of this principle. Many accepted commissions in the British army; others joined the numerous guerrilla bands that allied themselves with the British. New York alone contributed more than twenty-three thousand soldiers to the British cause. Loyalists flocked to regiments such as Butler's Rangers and Johnson's Loyal Greens.

The loyalists who remained in civilian life were severely persecuted. They were subjected to harsh laws and restrictions. They lost the right to vote. They were forbidden to hold public office. Some had their property confiscated; others were publicly tarred and feathered. Tories were totally banished from eight of the colonies. Many loyalists faced such severe social and commercial ostracism that they fled to England, Canada, or the Bahamas. Stripped of wealth and provisions, they encountered great hardships as they fled. Legend tells of a John MacRae, fittingly nicknamed "the Dog," whose hunger forced him to eat his canine companion as he made his way to Upper Canada. Overall, it is estimated that over sixty thousand refugees left the thirteen colonies between 1775 and 1787.

The British considered the Tories loyal subjects of the crown, and Britain endeavored to look after their interests. All who fled to Canada received sizable land grants in the fertile St. Lawrence valley and the Niagara peninsula. Each displaced loyalist family also received a cow, a spade, a plow, and seed for the first year. In addition, these Tories were given British protection, and the right to bear the title United Empire Loyalist after their name. Britain spent over six million pounds on the relocation effort. Still, how could an uncleared tract of Canadian wilderness compare to the wealth and prestige the loyalists had left behind in America?

At peace negotiations in Paris after the war, the British government insisted on repayment for the losses suffered by the Tories. The American delegates finally decided to submit to Britain's demands. Their decision was later ratified by Congress. Congress, however, was weak and unsure of its position; the agreement was unheeded by the various states. The Tories who had remained in the newly formed United States continued to be persecuted. Their troubles continued until, during the War of 1812, they had an opportunity to prove their loyalty to the United States of America.

APPENDIX D

Skill Content of LEARN ABOUT WORDS Sections

ROSE (5.0)

	Section	Word Meaning or Word Analysis Skill	POWER BUILDER NUMBER	Distribution of Skills 1	2	3	4	5	6	7	8	9	10	11
Word Meaning	A	Vocabulary: Word meaning from context of story		●	●	●	●	●	●	●	●	●	●	●
	B	Vocabulary: Semantic variations (from story)		●	●	●	●	●	●	●	●	●	●	●
Phonic and Structural Word Analysis	(Sections C, D, and E)	Vowel review: short & long					●			●				●
		Vowels + r: ar er ir or ur			●	●								
		Compounds							●		●		●	
		Tricky final consonants d (t), s (z), x (ks), ck (k)		●				●				●		
		Two consonants one sound: ch, sh, wh, th					●			●				●
		Hard and soft c and g			●	●								
		Consonant blends bl, cl, fl, gl, pl, sl							●		●		●	
		Contractions		●				●				●		
		Base words + s, es, ed, ing					●			●				●
		Silent or f-sound of ph, gh			●	●								
		Double vowel special sound: aw-au, ew-eu, ow-ou							●		●		●	
		Prefixes: in, un (not); re (again)		●				●				●		

RED (5.5)

	Section	Word Meaning or Word Analysis Skill	POWER BUILDER NUMBER	Distribution of Skills 1	2	3	4	5	6	7	8	9	10	11
Word Meaning	A	Vocabulary: Word meaning from context of story		●	●	●	●	●	●	●	●	●	●	●
	B	Vocabulary: Semantic variations (from story)		●	●	●	●	●	●	●	●	●	●	●
Phonic and Structural Word Analysis	(Sections C, D, and E)	Vowel review: short; silent e						●	●					
		Consonant blends br, cr, dr, fr, gr, pr, tr			●							●	●	
		Silent k, g, b; three sounds of ch				●	●				●			
		Alphabetical order (dictionary skills) to 1st letter		●						●				●
		Suffixes: ful (full of), less (without)						●	●					
		Consonant blends sc, sn, sm, sw, sp, st, scr, sch			●							●	●	
		Base words + er (more), est (most)				●	●				●			
		Alphabetical order (dictionary skills) to 2d letter		●						●				●
		Homonyms						●	●					
		Re & un as prefixes and when not prefixes			●							●	●	
		Double vowel special sounds: ei-ey, oi-oy, o͞o-o͝o, ea				●	●				●			
		Alphabetical order (dictionary skills) to 3d letter		●						●				●

ORANGE (6.0)

	Section	Word Meaning or Word Analysis Skill	Distribution of Skills										
		POWER BUILDER NUMBER	1	2	3	4	5	6	7	8	9	10	11
Word Meaning	A	Vocabulary: Word meaning from context of story	●	●	●	●	●	●	●	●	●	●	●
	B	Vocabulary: Semantic variations (from story)	●	●	●	●	●	●	●	●	●	●	●
Phonic and Structural Word Analysis	(Sections C, D, and E)	Vowel review: short; double vowel, one silent	●			●			●				
		Alphabetical order (dictionary skills) to 1st letter		●				●		●			
		Syllabication, 1st rule: two consonants between 2 vowels			●							●	
		Syllabication, 2d rule: 1 consonant between 2 vowels					●				●		●
		Syllabication, 3d rule: words ending in le	●			●			●				
		Alphabetical order (dictionary skills) to 2d letter		●				●		●			
		Suffixes: y, ly (having the quality of); man (one who)			●							●	
		Contractions					●				●		●
		Prefixes: dis (apart); mis (wrong)	●			●			●				
		Alphabetical order (dictionary skills) to 3d letter		●				●		●			
		Base words + beginnings & endings (re turn ing)			●							●	
		Compounds					●				●		●

GOLD (7.0)

	Section	Word Meaning or Word Analysis Skill	Distribution of Skills										
		POWER BUILDER NUMBER	1	2	3	4	5	6	7	8	9	10	11
Word Meaning	A	Vocabulary: Word meaning from context of story	●	●	●	●	●	●	●	●	●	●	●
	B	Vocabulary: Semantic variations (from story)	●	●	●	●	●	●	●	●	●	●	●
Phonic and Structural Word Analysis	(Sections C, D, and E)	Prefixes: re, un, im					●	●			●		
		Syllabication, 4th rule: words ending in ed			●					●		●	
		Syllabication, 5th rule: words ending in er, ing	●			●							
		Syllabication, 6th rule: letters that stay together		●					●				●
		re, un, im when not prefixes					●	●			●		
		Synonyms			●					●		●	
		Prefixes: in, un, im (not); in (in)	●			●							
		Prefixes: pre, per; ab, ad; con, com; de, ex		●					●				●
		Base words from larger words					●	●			●		
		Homonyms			●					●		●	
		Suffixes: ist, man (one who); ish, ness (having the quality of)	●			●							
		Compounds		●					●				●

BROWN (8.0)

	Section	Word Meaning or Word Analysis Skill	Distribution of Skills										
		POWER BUILDER NUMBER	1	2	3	4	5	6	7	8	9	10	11
Word Meaning	*A*	Vocabulary: Word meaning from context of story	●	●	●	●	●	●	●	●	●	●	●
	B	Vocabulary: Semantic variations (from story)	●	●	●	●	●	●	●	●	●	●	●
Phonic and Structural Word Analysis	*(Sections C and D)*	Roots: Latin & Greek; meaning and use; word origin			●			●			●	●	
		Prefixes		●		●							●
		Suffixes	●				●		●	●			
		Synonyms			●			●			●	●	
		Antonyms		●		●							●
		Homonyms	●				●		●	●			
		Idioms	●				●		●				

TAN (9.0)

	Section	Word Meaning or Word Analysis Skill	Distribution of Skills										
		POWER BUILDER NUMBER	1	2	3	4	5	6	7	8	9	10	11
Word Meaning	*A*	Vocabulary: Word meaning from context of story	●	●	●	●	●	●	●	●	●	●	●
	B	Vocabulary: Semantic variations (from story)	●	●	●	●	●	●	●	●	●	●	●
Phonic and Structural Word Analysis	*(Sections C and D)*	Roots: Latin & Greek; meaning and use; word origin				●				●		●	●
		Prefixes		●			●				●		
		Suffixes	●		●			●	●				
		Synonyms				●				●		●	●
		Antonyms		●			●				●		
		Idioms	●		●			●	●				

LIME (10.0)

	Section	Word Meaning or Word Analysis Skill	Distribution of Skills										
		POWER BUILDER NUMBER	1	2	3	4	5	6	7	8	9	10	11
Word Meaning	*A*	Vocabulary: Word meaning from context of story	●	●	●	●	●	●	●	●	●	●	●
	B	Vocabulary: Semantic variations (from story)	●	●	●	●	●	●	●	●	●	●	●
Phonic and Structural Word Analysis	*(Sections C and D)*	Roots: Latin & Greek; meaning and use; word origin				●	●	●		●			
		Prefixes		●	●				●			●	
		Suffixes	●								●		●
		Synonyms-antonyms				●	●	●		●			
		Idioms		●	●				●			●	
		Figures of speech	●								●		●

GREEN (11.0)

	Section	Word Meaning or Word Analysis Skill	Distribution of Skills										
		POWER BUILDER NUMBER	1	2	3	4	5	6	7	8	9	10	11
Word Meaning	*A*	Vocabulary: Word meaning from context of story	●	●	●	●	●	●	●	●	●	●	●
	B	Vocabulary: Semantic variations (from story)	●	●	●	●	●	●	●	●	●	●	●
Phonic and Structural Word Analysis	*(Sections C and D)*	Roots: Latin & Greek: meaning and use; word origin	●			●				●	●		
		Prefixes		●	●			●					●
		Suffixes					●		●			●	
		Synonyms-antonyms	●			●				●	●		
		Idioms		●	●			●					●
		Figures of speech					●		●			●	

PURPLE (12.0)

	Section	*Word Meaning or Word Analysis Skill*	*Distribution of Skills*										
		POWER BUILDER NUMBER	1	2	3	4	5	6	7	8	9	10	11
Word Meaning	*A*	Vocabulary: Word meaning from context of story	●	●	●	●	●	●	●	●	●	●	●
	B	Vocabulary: Semantic variations (from story)	●	●	●	●	●	●	●	●	●	●	●
Phonic and Structural Word Analysis	*(Sections C and D)*	Roots: Latin & Greek; meaning and use; word origin			●				●			●	●
		Prefixes	●				●				●		
		Suffixes		●		●		●		●			
		Synonyms-antonyms			●				●			●	●
		Idioms	●				●				●		
		Figures of speech		●		●		●		●			

The nine skill-content charts for the "Learn About Words" sections of the Power Builders are identified by both grade and color level. These charts show the kind of word-study skills taught in each of the sixteen Power Builders of a color level, and the distribution of the exercises within that level.

The basic thesis of the SRA READING LABORATORIES is that good teaching is continually both diagnostic and remedial: it is *developmental.* As a developmental program, the laboratories (1) provide for introduction of a skill, (2) include sufficient "guided" repetition to enable mastery of a skill, and (3) build readiness for moving to a higher level of difficulty.

If a student consistently scores low in the "Learn About Words" sections, he may need more practice in word-study skills than in comprehension skills, or he may need an introduction to more elementary skills than those found at his current color level. A short interview including an informal tryout on one or two "Learn About Words" sections at his present level and a lower one can suggest the type of review the student needs. List the color-numbers of Power Builders that will provide him with further practice in these skills on the inside front cover of his Student Record Book.

Teachers may find the skill-content charts most useful in providing additional practice for students reading in the upper levels of *SRA Reading Laboratory IIIb.* A good student, for instance, reading in the Lime level of Power Builders may find himself in difficulty because synonyms and antonyms are presented in the same exercise. This student could be referred to the C and D exercises of Tan Power Builders 2, 4, 5, 8, 9, 10, and 11 for additional practice in distinguishing antonyms and synonyms. The student may keep his own record of this additional work in his record book, but he need not record the results of it on his Power Builder progress chart.

APPENDIX E: POWER BUILDER TITLE LIST

5.0 ROSE

1. Uncommon Comic
2. Traveling in the Jungle *by Armstrong Sperry*
3. The Cowboy's Bandanna *by J. Frank Dobie*
4. O-Sono's Revenge *by Carolyn Gloeckner*
5. Early Days of the Mail *by Hanson Hart Webster*
6. Icarus *by Margaret Evans Price*
7. Incredible Io *by Inéz Castro*
8. The Day I Unpacked the Snakes *by Raymond Ditmars*
9. Danger—Keep Off! *by Frances Rogers and Alice Beard*
10. Guideline *by Carolyn Gloeckner*
11. The Vanished City *by Milton Lesser*

5.5 RED

1. Milk *by Grace H. Glueck*
2. Cover Girl *by Rosalie Koskenmaki*
3. Riding the Blue Colt *by Ralph Moody*
4. Why We Walk in Circles *by Nathan A. Court*
5. Arctic Adventure *by Tony Simon*
6. Wild Animals Face to Face *by Alan Moorehead*
7. Girl Wonder of Wall Street *by Kathleen Bowman*
8. The Big Wind *by Ralph Moody*
9. She Swims with Sharks *by Lisa Yount*
10. Oh, Spaghetti! *by Carolyn Gloeckner*
11. Mister Imagination *by George Kent*

6.0 ORANGE

1. A Pound of Butter, *author unknown*
2. Elsa Kills a Buffalo *by Joy Adamson*
3. Mrs. Fields (as in the Cookie) *by Ralph Gardner, Jr.*
4. Runaway Train *by Hal Butler*
5. Dogs That Have Known Me *by Jean Kerr*
6. Living Light *by Norman T. Mattox*
7. Telling Her Family's Stories *by Lisa Yount*
8. Surprises in Ice *by Leverett Richards*
9. At Sunrise, On Mars *by Carolyn Gloeckner*
10. A Hole-in-the-Ground Hobby *by Russell H. Gurnee*
11. The Whistle Language of La Gomera *by André Classe*

7.0 GOLD

1. Project Orbis *by Lisa Yount*
2. Mississippi Steamboat Days *by Earl Schenck Miers*
3. The Day the Big Top Burned *by Emmett Kelly*
4. Mrs. Confedrington *by Mark Walker*
5. Rain Is Born *by Guy Murchie*
6. The Ten-Gallon Hat *by Albert Q. Maisel*
7. Tough Teen to Tennis Queen *by Aylesa Forsee*
8. Tame Volcanoes *by Willy Ley*
9. The Open Window *by Saki (H. H. Munro)*
10. Digging Up the Past *by Lisa Yount*
11. North of the Arctic Circle *by Erick Berry*

8.0 BROWN

1. The Cold and the Deep: Ama Divers of the East
2. Two Loaves of Bread *by O. Henry*
3. 18,000 Feet—and No Parachute *by Ian Mackersey*
4. Sleepwalking—Fact or Fancy? *by Norma Lee Browning*
5. Abalone Spells Adventure *by Roy L. Abbott*
6. Nightmare *by Carolyn Gloeckner*
7. Clumsy World for Lefty *by Wesley S. Griswold*
8. The Rock *by Mary Goodnurse*
9. Unsolved Mystery The Sea *by Peter Freuchen*
10. Zenobia, Queen of the East *by Richard Halliburton*
11. Winter Comes to the Animal World *by Marston Bates*

9.0 TAN

1. Dorothy L. Brown: A Woman of Firsts *by Elizabeth Levy and Mara Miller*
2. Rescue at Sea, *author unknown*
3. Michigan's Marching Dunes *by Norman Carlisle*
4. Give Me to Drink, Ambrosia *by Margery Allingham*
5. Organized Crime—Eighteenth Century Style *by Laurence Thompson*
6. Oh, To Be a Steamboatman *by Samuel L. Clemens*
7. Opening Up the Earth *by Lisa Yount*
8. Buried Treasure *by Thomas Penfield*
9. The Marvelous Model "T" *by John Keats*
10. The Giants of Easter Island *by Thor Heyerdahl*
11. The Capture of Geronimo *by Earl S. Fleming*

10.0 LIME

1. Recipe for Murder *by C. P. Donnel, Jr.*
2. Two for a Nickel *by Harry Golden*
3. Fact Catches Up with Fiction *by Isaac Asimov*
4. An Artist's Story *by Carolyn Gloeckner*
5. Dear Miss O'Neill *by Leo Rosten*
6. The "Upstart Crow" *by Genevieve Foster*
7. The Mathematics of Self-Deception
8. The Piece of String *by Guy de Maupassant*
9. Women in Space—and the Women Who Help Them Fly *by Lisa Yount*
10. The Real Sherlock Holmes *by Vincent Starrett*
11. America's First Elephant *by Robert M. McClung and Gale S. McClung*

11.0 GREEN

1. Geraldine Ferraro, Making History *by Margeret W. Brimacombe*
2. Most Popular Characters *by Farrell and Wilbur Cross*
3. Twins, Genes, and Environment *by Ashley Montagu*
4. Life on Other Planets *by Isaac Asimov*
5. Jefferson Today *by Saul K. Padover*
6. Counterfeiting: Once Money, Now Everything *by James R. Chiles*
7. Insect Life in Winter *by E. Laurence Palmer*
8. My Life with Mij *by Gavin Maxwell*
9. Fat Facts to Fascinate *by Gina Kolata*
10. You Need More Than a Typewriter *by Erskine Caldwell*
11. The Death of a Lone Oak *by Edwin Way Teale*

12.0 PURPLE

1. Untitled story about the automat *by Daniel Cohen*
2. Before Opening Night *by Harold Clurman*
3. Why Are You Laughing? *by Ashley Montagu*
4. A Key to the Universe *by Elma Ehrlich Levinger*
5. The Music of Ellen Zwilich *by Tim Page*
6. A Word to Moonstruck Poets *by Simone Daro Gossner*
7. Why I Love Wisconsin *by Frank Lloyd Wright*
8. Beyond Great Expectations *by Susan Witty*
9. The Etruscan Enigma *by Raymond Bloch*
10. The Sax Comes of Age *by Gilbert Millstein*
11. Magic Under the Microscope *by Eugene Kinkead*

APPENDIX F: LITERATURE STRAND TITLE LIST

ROSE

1. The Face on the Laundry Room Floor *by B. J. Chute*
2. Harrison Bergeron *by Kurt Vonnegut, Jr.*
3. A Wagner Matinee *by Willa Cather*

RED

4. Adventures of a Haversack *by Heinrich Böll*
5. Echo from Ithaca *by G. B. Stern*
6. The Dead Man *by Horacio Quiroga*

ORANGE

7. The Great Wide World over There *by Ray Bradbury*
8. The Old Demon *by Pearl S. Buck*
9. Who Knows? *by Guy de Maupassant*

GOLD

10. The Blind Man *by D. H. Lawrence*
11. Lost at C *by Jean Shepherd*
12. Hook *by Walter Van Tilburg Clark*

BROWN

13. The Snow Goose *by Paul Gallico*
14. Silent Snow, Secret Snow *by Conrad Aiken*
15. Publicity *by Margery Allingham*

TAN

16. The Blue Lenses *by Daphne du Maurier*
17. Bartleby the Scrivener *by Herman Melville*
18. O Russet Witch *by F. Scott Fitzgerald*

LIME

19. Of This Time, Of That Place *by Lionel Trilling*
20. The Man That Corrupted Hadleyburg *by Samuel L. Clemens*
21. The Dead *by James Joyce*

GREEN

22. To a High Place *by Teo Savory*
23. Whalesong *by Robert Siegel*
24. Family Happiness *by Leo Tolstoy*

PURPLE

25. The Crazy Hunter *by Kay Boyle*

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AN OPEN LETTER FROM THE AUTHOR

DEAR COLLEAGUE:

If we are to meet the challenge of this atomic, electronic, and space age, each individual of our society must be able to find and develop his peak functional, or usable, intelligence. We can no longer afford to let a student with *x* learning capacity operate at less than *x* level of achievement. Our way of life as a nation among nations now depends on how well we succeed in increasing the achievement of each individual.

The incidence of automation is no less a reason for developing the functional, usable intelligence of each individual citizen. Machines, which are daily eliminating the routine, repetitive jobs of scores of less skilled workers throughout the nation, are at the same time demanding more workers who can function at higher levels. While the need for relatively unskilled workers diminishes, the demand for skilled workers and technicians increases. As never before, education must help each individual—the slow, the average, and the superior—to find and to learn to use his highest level of intellectual achievement. The SRA READING LABORATORY is devoted to helping educators with this task.

By taking a few minutes at the end of your semester's work with the lab to set down some of your ideas on the questionnaire that follows, you are furthering this important work. It is hoped that out of your responses, and those of your colleagues in many parts of the world, may evolve a periodical newsletter for the exchange of ideas on further individualizing instruction, not only in reading and study skills but in every other area of academic achievement.

Please consider this a personal invitation from the author to contribute.

Sincerely,

DON H. PARKER

Toward Further Research

1. I teach grade_____in the

2. _____School, located in

3. _____

4. I used *SRA Reading Laboratory IIIb* from_____ to_____for approximately_____class periods during the school year 19_____–19_____.

5. If a standardized reading achievement test was given both before and after using the lab, please give:
   Name of test used_____ Forms_____.
   Mean or median reading comprehension score for the class on pretest_____; on posttest_____. (If no standardized tests were given, please don't hesitate to send in the other information on this sheet.)

6. Other materials used during the above period to teach reading and study skills:
   _____

Did you consider the *SRA Reading Laboratory IIIb* a basic or an auxiliary program?

_____

7. How much transfer of training from the SRA READING LABORATORY to the other subjects you teach do you think your students experienced?
   none ☐ a little ☐ a moderate amount ☐ a great deal ☐

8. In what subject (s), if any, was transfer evident? (If more than one, please rank in order, starting with the subject where transfer was highest.) _____
   _____

9. Of what importance do you feel SQ3R is to your students? _____
   _____

10. With respect to the Listening Skill Builders, please check one of the following:
    I would like more ☐ fewer ☐ same quantity ☐

11. What suggestions have you for improving the effectiveness of the Listening Skill Builders? _____

12. With respect to the Listening-Notetaking Skill Builders, please check one of the following:
    I would like more ☐ fewer ☐ same quantity ☐

13. What suggestions have you for improving the effectiveness of the Listening-Notetaking Skill Builders? _____
    _____

14. Do you grade your pupils on SRA READING LABORATORY work? Yes ☐ No ☐
    If so, how? _____
    _____

15. Have you ever used the progress charts in conferences with parents? _____

16. Have you found the Teacher's Handbook helpful? Yes ☐ No ☐
    Please check one of the following: I have followed it
    very closely ☐ fairly closely ☐ a little ☐ not at all ☐

17. What suggestions have you for improving the SRA READING LABORATORY program?
    _____
    _____

18. Should other sets of multilevel, laboratory-type materials similar to the SRA READING LABORATORY be made available? Yes ☐ No ☐
    If so, in what subject areas?
    _____ Grade (s) _____
    _____ Grade (s) _____

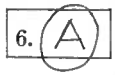
When completed, mail to: Don H. Parker, SRA Reading Laboratories,
Science Research Associates, Inc., 155 North Wacker Drive, Chicago, IL 60606

Scoring the Starting Level Guide

1. Fold all Starting Level Guides so that Selection A is on top.

2. Place key column alongside the column of response boxes.

3. If the student's response is correct, make no mark. If the student's response is wrong, draw a circle round the incorrect letter, thus:



Selection A

1. **B**
2. **A**
3. **C**
4. **B**
5. **D**
6. **C**
7. **C**

Selection B

1. **D**
2. **C**
3. **B**
4. **D**
5. **C**
6. **D**
7. **A**
8. **D**
9. **B**

SRA

Reorder No. 3009901

1

Uncommon Comic

© 1988 Michael Jacobs/MJP

Geri Jewell performing

1 "I've got CP," comedienne Geri Jewell says right at the start. She has walked onstage with the clear signs of a cerebral palsy victim. She has the slightly uneven gait; her head is tilted to one side; her arms flutter a bit. "And you know what's the biggest problem I have being a woman with cerebral palsy?" she asks the audience. "Plucking my eyebrows!" She waves her hand jerkily over her face. Geri is working at the Improvisation, a Los Angeles comedy club. The crowd wonders if she is joking. They wonder if it's okay to laugh. Then Geri Jewell delivers her next punch line: "How do you think I got pierced ears?" Laughter fills the room.

2 Normally cerebral palsy is not a laughing matter. It is a central-nervous-system disorder. And it's incurable. Yet for this thirty-one-year-old woman, laughter has been a great help. It is the means by which she has been able to rise above her problem. It has enabled her to pursue her show-business ambitions, and it has helped her to reach the public. Her performances and her benefit work have aided her in making known to others the capabilities of the handicapped.

Based on "Uncommon Comic" by James Horowitz. Reprinted by permission of Russell and Volkening, Inc. as agents for the author.
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3 "I do have a condition where my body doesn't always do what my brain tells it to," she says. "But because you have cerebral palsy and can't control your movements, people think you're retarded or drunk. Through comedy, I'm able to communicate there's nothing wrong with my mind. I think the best comedy draws on life. By ignoring my CP, I'd be ignoring a large part of my life."

4 Geri grew up in several towns in southern California. "Lonely and frustrating" is how she describes her childhood years. "Mothers wouldn't let their kids play with me." She went to special schools for the handicapped. She was, she says, "bored by the sheltered atmosphere of low expectations, no competition." There was, however, at least one high point.

5 Geri was always something of a performer. And in her thirteenth year, while still at a special school, she got the chance to do just that. One of her teachers asked her what she wanted to do with the rest of her life. She replied that she wanted to be an actress. A few weeks later the teacher assigned Geri to write a play. Her whole class would help put it on. They would be the actors. They would build the sets. They would play the music and they would sing. The play was a great success. But more important, the experience had whetted Geri's appetite to go on the stage.

6 Geri was a determined girl. She would not be stopped by her physical handicaps. She decided not to take the safe way. She went to a regular high school. Still, life did not run smoothly; she was looked upon as a misfit.

7 A bright girl, Geri went on to college. She studied theater arts. One day she told her parents she wanted to go to Hollywood; she would try to get into show business. "It was painful and frightening for them," she says. "They thought I was insane." But they didn't stop her, and she was going to try. "Show business was always my goal," she says. "After all, I'd never be hired for a normal job. I tried once. It took me forty-five minutes to fill out the application."

8 In 1978, she worked up a routine. She tried it out at the Comedy Store, a well-known Hollywood club. She was a success. From there she went on to travel the comedy-club circuit. Sometimes she performed as often as five nights a week.

9 In 1981, Geri gave a very successful performance at a benefit dinner. It resulted in a great leap forward in her show-business career. Producer Norman Lear had caught her act that night. He signed her for the role of

Courtesy of Geri Jewell

Cousin Geri in his hit series *The Facts of Life.* This in turn led to a part in the TV movie *Two of a Kind* with George Burns and Robby Benson. In 1984, Geri's autobiography *Geri* was published. "Now when people stare at me," she points out with good humor, "it's because they know who I am and not because they think I walk funny."

10 These days, Geri has returned to her first love. She is again doing stand-up comedy. She is also writing and studying acting. "I don't believe in limits," she says. "So many people are afraid to try, afraid to fail. The real triumphs come when you get out of the safety zone and take risks. I'm willing to take all kinds of risks. My comedy is about the human condition. I'm trying to tell people they should give themselves more credit, feel less victimized, not be stopped by the judgments other people put on them."

HOW WELL DID YOU READ?

How carefully did you read?

1. **Which of these is not mentioned in the story as a sign of cerebral palsy?**
   - **A** Partial paralysis
   - **B** An irregular walk
   - **C** Jerky movements

2. **Geri Jewell believes that the best comedy is based on**
   - **A** love
   - **B** life
   - **C** illness

3. **Geri's interest in show business was encouraged when a teacher asked her to**
   - **A** sing in a choir
   - **B** put on a variety show
   - **C** write a play

4. **At the opening of the story, Geri Jewell was**
   - **A** directing a play about the handicapped
   - **B** writing her autobiography
   - **C** doing stand-up comedy

Can you draw the right conclusions?

5. **During her childhood years, Geri probably felt**
   - **A** content
   - **B** lonesome
   - **C** underprivileged

6. **When Geri told her parents that she wanted to go to Hollywood, they**
   - **A** worried about her but allowed her to go
   - **B** became upset and tried to prevent her from going
   - **C** were understanding but helped her find a more realistic goal

Did you understand the character?

7. **Geri Jewell can best be characterized as**
   - **A** talented, fearful, humorous
   - **B** talented, self-conscious, unrealistic
   - **C** talented, determined, optimistic

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. way; method *(2)*
2. mentally slow; limited in development *(3)*
3. sharpened *(5)*
4. poorly adjusted person *(6)*
5. very foolish *(7)*
6. opinions *(10)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. start *(1)*
- **A** sudden movement
- **B** beginning
- **C** lead; handicap

8. disorder *(2)*
- **A** messiness; lack of neatness
- **B** riot; break in the peace
- **C** disease; illness

9. routine *(8)*
- **A** regular way of doing things
- **B** fixed piece of entertainment
- **C** computer instructions in a special order

10. club *(8)*
- **A** stick; bat
- **B** group of persons
- **C** place for entertainment

11. part *(9)*
- **A** role of a character
- **B** piece of a whole
- **C** share; portion

C. box check

When *x* ends a word it sounds like *ks*.
When *ck* ends a word it sounds like *k*.

Directions: Read the sentence and decide whether *x* or *ck* is needed to fill the blank. Write the word.

12. On the desert, there is a la__ of rain.

13. Watch the fighter fle__ his muscles.

14. There were si__ problems to work.

15. She felt si__.

16. Did you pay your income ta__?

17. A spe__ of dust got in her eye.

D. it is = it's
they shall = they'll

Sometimes we put two words together and use an apostrophe (') to show where one or more letters have been dropped. The new word is a **contraction.**

Directions: Write the contractions for these words.

18. we will

19. have not

20. would not

21. does not

22. you have

23. he had

24. she would

25. he is

E. *re* + pay = repay (pay back)
in + sincere = insincere (not sincere)

The **prefixes** *re-* and *in-* can be added to many base words. *Re-* means "back" or "again," and *in-* means "not."

Directions: Add *re-* or *in-* to each of these words to make it fit the meaning given. Write the new word.

26. __active (not active)

27. __tell (tell again)

28. __call (call back)

29. __definite (not definite)

30. __accurate (not accurate)

31. __bound (spring back)

32. __considerate (not considerate)

33. __fill (fill again)

2

by Armstrong Sperry

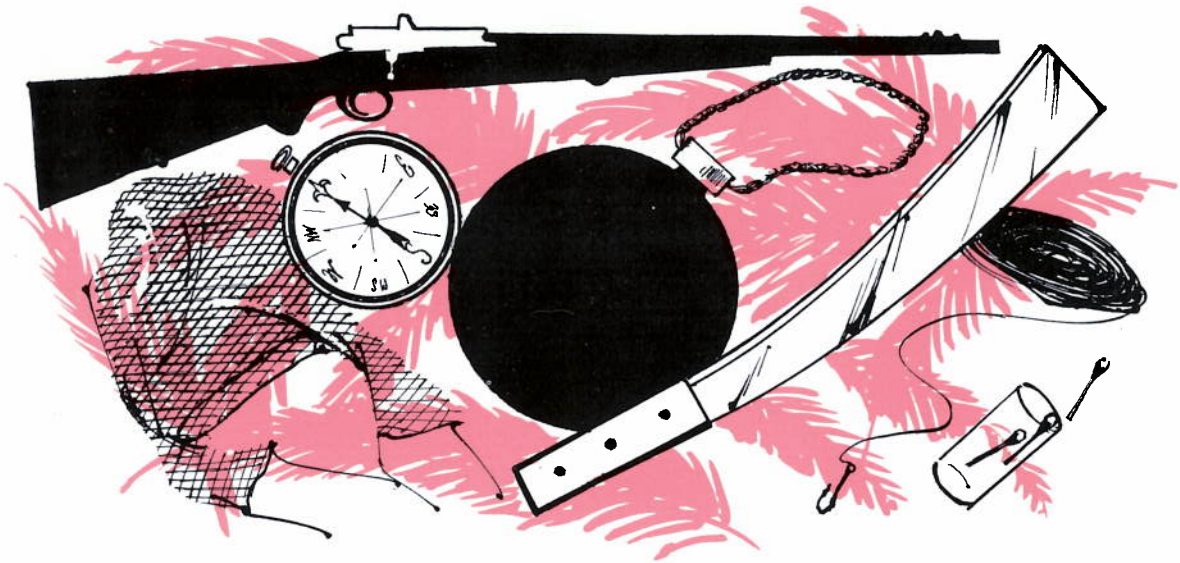
Traveling in the Jungle

1 Jungle country is not friendly, but it is possible to survive there. You must have the right equipment and you must know a few important things about woodcraft. Then your chances of staying alive are very good.

2 No one should go into the jungle without the right equipment. You need lightweight clothing, a good sheath knife or machete, and a compass. Fishhooks and a line, a rifle and ammunition, matches in a waterproof container, and a poncho are necessary too. So is a mosquito net to protect the head.

3 In the jungle you can get hopelessly lost within five minutes after leaving a known landmark. That is why you should always carry a compass. In open country, during the day, you can tell which way to go by studying the sun. At night the stars are sure guides to direction. But in most places the jungle rooftop is so thick that it is impossible to see the sun or the stars. Again and again you must check your position by the compass.

4 Keep alert. Watch the ground in front of you carefully. Stop and listen now and again. Avoid haste, and rest often. In a place that is hot



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and humid, the person who sets a fast pace will soon become tired. A steady, even pace is wisest in the long run.

5 If you lose your way, don't panic. Try to decide how long it has been since you were sure of your position. Mark the spot where you are with blazes on a tree. Put them on four sides of the tree, so that you will be able to see them from any direction. Then you can begin retracing your steps, knowing that you can always find the spot from which you started. Except in an emergency, never try to travel through the jungle at night.

6 Whenever possible, it is wise to follow streams and rivers that are going in your general direction. This may cause you many extra miles of travel. But in the end it will save time and energy. Nothing is more exhausting than hacking a trail cross-country through unbroken jungle.

7 If a river is broad and deep and has no rapids, rafting is the best means of travel. Bamboo grows along the banks of many jungle streams. Since it is hollow and extremely strong, it makes a perfect raft.

8 If possible, stay away from high ridges when you are traveling through jungle country. They are often covered with rattans. Rattans are climbing palms. They have sharp thorns that rip and tear at your clothing. Even with a sharp machete, it is almost impossible to hack a path through rattans without getting completely entangled in them.

9 Mosquitoes, ticks, and leeches will be with you all the time. The only defense against them is to wear the right kind of clothing. You should never wear shorts in the jungle. Your trousers must be lightweight and long. The cuffs should be tucked into your boot tops.

10 Finding water that is safe to drink can be a problem. Many streams and rivers carry germs that can be deadly to man. Streams found near native villages are always dangerous, even if they are clear and fresh-looking. Such water must always be boiled before you drink it.

11 Luckily, the jungle has many kinds of plants and vines that give water. The big rough-barked vines called lianas are one of the best sources of water. A section several feet long should give you more than a pint of clear water. Water from almost all plants is pure enough to drink. But stay away from vines that have bitter or milky sap.

12 Many jungle plants also provide food. Before you go into the jungle, learn to recognize the varieties of plants that can be eaten. If you haven't had a chance to do this, watch what kinds of fruits and nuts the birds and monkeys choose. Such food is almost always safe for a man to eat.

13 When you are seeking meat, rivers and streams are the best places to hunt. You do not need to be familiar with the many different kinds of birds and mammals. You can eat any of them.

14 Animals that do not eat plants eat each other. When you see an animal in the jungle, you can be sure that its source of food is somewhere close by. That source may mean for you the difference between going to sleep well fed or hungry.

15 Surviving in the jungle is a science. The jungle peoples have become perfect in this science, and you can too. Learn as much as you can about what to expect in the jungle. Make sure you have the right equipment. Then no part of the jungle will seem completely unfriendly or frightening. In fact, you will be able to "live off" it for a long time.

HOW WELL DID YOU READ?

What does the writer think?

1. **For keeping alive in the jungle, the right equipment is**
   - **A** more important than a knowledge of woodcraft
   - **B** less important than a knowledge of woodcraft
   - **C** just as important as a knowledge of woodcraft

2. **For checking your position in the jungle you should rely on**
   - **A** known landmarks
   - **B** the sun and stars
   - **C** a compass

3. **In moving through the jungle you should**
   - **A** set a fairly rapid pace
   - **B** retrace your steps from time to time
   - **C** stop and rest often

Can you draw the right conclusion?

4. **The author probably advises against traveling at night because**
   - **A** one tends to move too slowly at night
   - **B** it is difficult to check your position then
   - **C** emergencies occur most frequently at night

What were the facts?

5. **Following streams and rivers will help you to**
   - **A** save many extra miles of travel
   - **B** avoid crossing unbroken stretches of jungle
   - **C** have a constant source of drinking water

6. **Rattans are climbing palms that**
   - **A** make excellent rafts
   - **B** give water
   - **C** have sharp thorns

7. **The best way to be sure of having enough food in the jungle is to**
   - **A** learn ahead of time what plants can be eaten
   - **B** travel only along streams and rivers
   - **C** watch the animals' eating habits

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. continue living *(1)*
2. things pointing the way *(3)*
3. damp *(4)*
4. going back over *(5)*
5. chopping roughly *(6)*
6. swift-moving waters *(7)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. head *(2)*
- **A** intelligence; reason
- **B** leader
- **C** top part of the body

8. check *(3)*
- **A** mark with a crisscross pattern
- **B** deposit for a short while
- **C** test; verify

9. blazes *(5)*
- **A** marks where bark is removed
- **B** light-colored spots
- **C** bursts of flame

10. general *(6)*
- **A** common
- **B** approximate
- **C** universal

11. familiar *(13)*
- **A** friendly
- **B** bold
- **C** well acquainted

C. altar herd firm worm turn

When the letters *ar, er, ir, or,* and *ur* are used in words, they often have the same sound. They all sound like the *er* in *her.*

Directions: Two letters are left out of each word. Decide whether *ar, er, ir, or,* or *ur* is missing. Write the word.

12. w__k
13. sail__
14. work__
15. f__nish
16. fl__t
17. awkw__d

D. The letters *c* and *g* have both a **hard sound** and a **soft sound.**

hard: cry, go
soft: cent, general

The letter *c* always has a soft sound before *e, i,* or *y.* The letter *g* sometimes has a soft sound before *e, i,* or *y.*

Directions: Say these words to yourself. Decide whether the *c* or *g* is hard or soft. Write *hard* or *soft.*

18. creep
19. actress
20. gyp
21. central
22. regret
23. celebrate
24. gave
25. genius

E. Sometimes *ph* has the sound of *f,* as in *elephant.* Sometimes *gh* has the sound of *f,* as in *laugh.* Sometimes *gh* has no sound, as in *high.*

Directions: Say each word softly to yourself. If *ph* or *gh* has the sound of *f,* write *f.* If the *gh* has no sound, write *silent.*

26. fought
27. enough
28. graph
29. phantom
30. mighty
31. triumph
32. thorough
33. flight

3

HIS BEST FRIEND ON THE RANGE

The Cowboy's Bandanna

by J. Frank Dobie

1 Today the cowboy seems to be giving up wearing the bandanna handkerchief. Perhaps he thinks it makes him look too much like a movie cowboy. Maybe he has found something more useful to take its place. But not long ago, he felt that it was almost as necessary a part of his outfit as a rope. And it had almost as many different uses. He could not get along without it.

2 Though called a handkerchief, a bandanna was not what we usually think of when we use the word. It was a large, bright square of cloth, made either of cotton or of silk. A silk one was prized above one made of cotton. The bandanna had a solid-color background and was printed with small figures of some sort. The most common color was red, but some bandannas were blue, and some black.

3 When the cowboy got up in the morning, the first thing he did was

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to go down to the water hole and wash his face. He used his bandanna for a towel, and then, though it might be wet, tied it around his neck, letting the fold hang down in front so that it looked like a necktie. Dressed in this way, he looked quite neat at breakfast.

4 One of a cowboy's jobs was to rope broncos. After he had roped out his bronc and tried to bridle him, he probably found that the horse had to be blindfolded before he could do anything with it. The bandanna was what he used for a blindfold. When he had mounted, he took the blindfold off the horse and put it again around his own neck.

5 Perhaps he rode only a short way before he saw a calf that should be branded. Then, in order to keep the calf from kicking, he had to tie its legs together. For this he needed a short piece of rope called a piggin' string. If he did not have one handy, he could always use his bandanna. He tied the calf's legs together with the bandanna and so kept it still while he branded it.

6 In the summer out on the range the cowboy wore his bandanna to protect himself from the sun. If he was riding away from the sun, he tied it so that it covered the back of his neck. If he was riding toward the sun, he made his bandanna into a half mask. He tied it so that the fold would hang over his cheeks, his nose, and his mouth. If his business was with a dust-raising herd of cattle, he tied the bandanna in the same way. Then it prevented him from breathing in the dust they raised. In blizzard weather the bandanna kept the cold from his face and ears.

7 The cowboy spent long hours in the cattle pens. The work there had to be done swiftly, without stopping. Sometimes sweat poured down his face and into his eyes, blinding him. Then, without losing time, he could grab a fold of the bandanna loosely hung around his neck and wipe away the sweat.

8 Many a cowboy used his bandanna to strain his drinking water. If the water was muddy or dirty, he spread his bandanna over it and drank through it. The bandanna may have been dirty too, but it was by far the cleanest thing he had. He made a habit of washing it in every water hole he came to. He would let it dry as he rode along, holding it in his hand or spread over the top of his hat. Or, if the day was hot, he wore the wet cloth under his hat to keep his head cool.

9 The bandanna might also be used as a cup towel or drying rag to wipe dishes with. At other times it was used for signaling, or to tie down a cowboy's hat when he rode in the

face of a windstorm. Occasionally the bandanna made a good sling for a broken arm or a quick bandage for a wound. It was even used, if the need should arise, as a rope to hang a man with.

10 Early Irish settlers on the Nueces River in southern Texas believed that a drowned man could be found with a bandanna he had worn. They would throw the bandanna into the river where the man had drowned. They thought that it would float until it came over the body. Then it would sink, marking the spot. And many a cowboy has been buried out on the lonely plains with a clean bandanna spread over his face to keep off the dirt.

11 Because it was so important in life in the Old West, the bandanna deserves to be called "the flag of the range country."

HOW WELL DID YOU READ?

How carefully did you read?

1. Among today's cowboys, bandannas are
   - A more popular than ever before
   - B essential for daily living
   - C not used very much

2. During branding a cowboy would use his bandanna to
   - A tie a calf's legs together
   - B identify a calf as his own
   - C blindfold a calf

3. One use for the bandanna not mentioned in the article was
   - A supporting a broken arm
   - B carrying personal belongings
   - C drying dishes

Did you grasp the main idea?

4. The bandanna may be called the "flag of the range country" because it was
   - A bright and easily seen
   - B useful in so many ways
   - C often used for signaling

Can you draw the right conclusions?

5. The most important quality of a bandanna was its
   - A cleanliness
   - B brightness
   - C strength

6. The author describes the method of finding a drowned man as though he
   - A believes it is still useful
   - B doubts it was ever used
   - C thinks it did not really work

7. Describing the ways the bandanna was used emphasizes the
   - A glamor of the Old West
   - B individuality of the cowboy
   - C hard life the cowboy lived

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. equipment *(1)*
2. valued *(2)*
3. kept from happening *(6)*
4. once in a while *(9)*
5. cloth supporting an injured limb *(9)*
6. has the right *(11)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. figures *(2)*
- **A** numbers
- **B** human forms
- **C** patterns

8. common *(2)*
- **A** public
- **B** usual
- **C** coarse

9. way *(5)*
- **A** manner
- **B** distance
- **C** direction

10. raised *(6)*
- **A** built; constructed
- **B** stirred up
- **C** improved

11. strain *(8)*
- **A** injure by pressure
- **B** pass through a filter
- **C** use to the fullest

C. alt<u>ar</u> h<u>er</u>d f<u>ir</u>m w<u>or</u>m t<u>ur</u>n

When the letters *ar, er, ir, or,* and *ur* are used in words, they often have the same sound. They all sound like the *er* in *her.*

Directions: Two letters are left out of each word. Decide whether *ar, er, ir, or,* or *ur* is missing. Write the word.

12. col__
13. h__l
14. ch__ch
15. teach__
16. coll__
17. th__d

D. The letters *c* and *g* have both a **hard sound** and a **soft sound.**

hard: <u>c</u>ry, <u>g</u>o
soft: <u>c</u>ent, <u>g</u>eneral

The letter *c* always has a soft sound before *e, i,* or *y.* The letter *g* sometimes has a soft sound before *e, i,* or *y.*

Directions: Say these words to yourself. Decide whether the *c* or *g* is hard or soft. Write *hard* or *soft.*

18. regal
19. gentle
20. giant
21. grief
22. cinder
23. give
24. close
25. city

E. Sometimes *ph* has the sound of *f,* as in *elephant.* Sometimes *gh* has the sound of *f,* as in *laugh.* Sometimes *gh* has no sound, as in *high.*

Directions: Say each word softly to yourself. If *ph* or *gh* has the sound of *f,* write *f.* If the *gh* has no sound, write *silent.*

26. night
27. although
28. cough
29. pheasant
30. straight
31. fought
32. lighten
33. physical

4

O-Sono's Revenge

by Carolyn Gloeckner

1 In the village of Mugenyama lived an old woman named O-Sono. Although she was poor, she was a happy person, finding in each new day much to please her. She lived in a small wooden hut that overlooked the sea. She kept a dozen fine, fat hens and a splendid red rooster. Behind her house was a garden plot in which she grew vegetables—some to eat and some to sell. Her most cherished possession, however, was a small bronze mirror given to her by her mother. Three lucky symbols were engraved on the back: the pine, the bamboo, and the plum.

2 It happened that O-Sono had a rich neighbor, Benkichi. Benkichi, an old woman also, was envious of O-Sono's happiness. Benkichi smiled when O-Sono's hens fell ill and ceased to lay, or when heavy spring rains caused water to pour through the roof of O-Sono's little hut.

3 One day the monks of the village gathered all the people together in the town square. "The temple needs a new bell," they explained to the villagers. "We do not have money to buy one, so we will cast it ourselves, using bronze from the village. Bring us bronze—your swords and cooking pots, your serving trays, cups, and dishes. We will melt the metal and make of it a new bell for the temple at Mugenyama."

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4 Benkichi was delighted by this turn of events. She knew that O-Sono's most prized possession was the bronze mirror. O-Sono would have to give up the mirror to make the bell!

5 In the heap of bronze objects left at the temple steps the next day, Benkichi did not see O-Sono's cherished mirror. She went from door to door through all the village, denouncing O-Sono for her selfishness.

6 "I have given my bronze combs, a present from the Emperor himself, and so many pots and jars that it took four of my servants to carry them to the temple steps. Many others have given as much or even more. Only O-Sono refuses to contribute. She will not give up her bronze mirror! What a vain and wicked woman!"

7 The other villagers began to chide O-Sono. They chased her chickens; they allowed their children to trample her garden. They felt that since they had given up many valuable possessions, she should be willing to do the same.

8 At last, O-Sono was compelled to take the mirror to the temple. With heavy heart and dragging steps, the old woman carried her most precious possession to the temple and placed it on the pile.

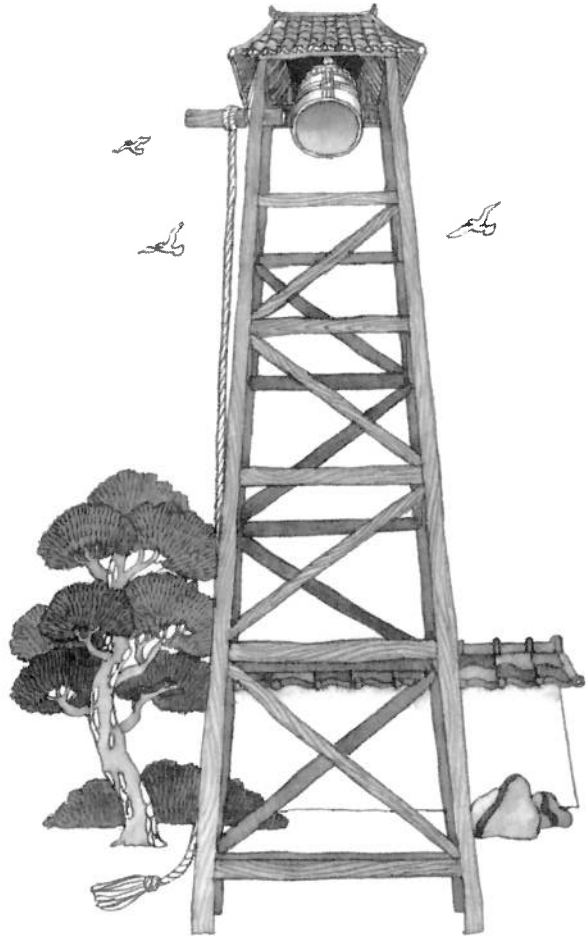
9 When time came to cast the new bronze bell, a most peculiar thing happened. The mirror would not melt! O-Sono hung her head in shame as the villagers accused her. The mirror had not been given out of generosity, they said. That it would not melt reflected the stinginess of its owner. The monks added more wood to the fire, said prayers, and made offerings in the temple. Finally the mirror melted, and the bell was cast.

10 The ringing of the temple bell mornings and evenings brought no joy to O-Sono. She no longer found pleasure in life. She felt ill-treated by her neighbors, and she sorely missed her mirror. Her garden went untended, and her chickens were left to fend for themselves.

11 Benkichi, of course, was pleased. O-Sono no longer sat humming in the sunshine in front of her house. She became as silent as a tree, as sour as a hard new persimmon. Time passed, and O-Sono, still grieving for the mirror, fell ill and died.

12 Her sons came from a distant city to bury her. Among her miserable possessions was a note written a few days before her death. It said: "The mirror taken from me was enchanted. Whoever breaks the bell will release the mirror. Whoever holds the mirror will become rich beyond all imagining."

13 The villagers had seen how the mirror resisted melting; they all believed O-Sono's note. Each wished to be the one to break the bell and become rich. Using sticks and staves,



stones and hammers, they attacked the bell, setting up a din that drew people from nearby villages. Word of O-Sono's note spread throughout the land. People came from hundreds of miles away to try their luck at breaking the bell.

14 The monks were dismayed. The incessant ringing of the bell gave them headaches and drove worshipers from the temple. They built a bell tower, lifting the bell up out of reach, but people then seized the bellpull and the bell pealed out even more loudly.

15 At last, the monks decided something must be done to end the continuous clangor once and for all. Late one moonless night, the appointed monk climbed into the bell tower and took the clapper from the bell. So it was that Mugenyama's bell fell silent, and O-Sono avenged her own death.

HOW WELL DID YOU READ?

Why did the characters behave as they did?

1. **Benkichi complained that O-Sono had not put the bronze mirror in the pile because Benkichi**
   - **A** felt O-Sono should give her fair share
   - **B** wanted the mirror for herself
   - **C** wanted to cause O-Sono unhappiness

2. **O-Sono wrote the note that was found after her death to**
   - **A** cause trouble for the villagers
   - **B** help her sons become wealthy
   - **C** force the monks to give the mirror back

Can you draw the right conclusion?

3. **This story is most likely set in**
   - **A** the American West, 200 years ago
   - **B** Japan, 800 years ago
   - **C** present-day Russia

4. **The author describes O-Sono's refusal to give up her mirror in a way that suggests**
   - **A** understanding
   - **B** disapproval
   - **C** amusement

5. **How did O-Sono get revenge for the loss of her mirror?**
   - **A** No one was able to break the bell and get rich.
   - **B** The monks got headaches from all the noise and the temple could not be used.
   - **C** The bell for which her mirror had been taken was silenced.

How carefully did you read?

6. **How many chickens did O-Sono own?**
   - **A** Ten
   - **B** Twelve
   - **C** Thirteen

7. **Which of these events happened first?**
   - **A** O-Sono stopped tending her garden.
   - **B** Benkichi saw that O-Sono had not put the mirror in the pile of bronze objects.
   - **C** People came from hundreds of miles away to try to break Mugenyama's new bell.

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. loved *(1)*
2. jealous *(2)*
3. criticizing *(5)*
4. scold; speak out angrily against *(7)*
5. loud noise *(13)*
6. made afraid by trouble *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. plot *(1)*
- **A** principle story of a literary work
- **B** secret plan for doing something evil
- **C** small area of planted ground

8. square *(3)*
- **A** open area where two or more streets meet
- **B** rectangle with four equal sides
- **C** product of a number multiplied by itself

9. steps *(5)*
- **A** short distances
- **B** stages in a process
- **C** stairs; rests for the foot

10. pile *(8)*
- **A** quantity of items heaped together
- **B** surface consisting of short dense fibers
- **C** slender column of wood driven into the ground

11. note *(12)*
- **A** melodic sound
- **B** short letter
- **C** mood; general quality

C. The letters *a, e, i, o,* and *u* are **vowels.** Long vowels say their names. Long vowels are found in words like

ā**pe** ē**agle** ī**ce** ō**pen** ū**niform**

Short vowels do not say their names. Short vowels are found in words like

ă**pple** ĕ**lephant** ĭ**nk** ŏ**x** ŭ**ncle**

When an accented syllable ends in a vowel, the vowel sound is usually long. When an accented syllable ends in a consonant, the vowel sound is usually short.

Directions: Look at the accented syllable in each word. Decide whether the vowel in the accented syllable is long or short. Write *long* or *short.*

12. sum′ mer
13. be′ ing
14. be yond′
15. en′ ter
16. fin′ ish
17. gro′ cer

D. ch sh wh th

Usually, when these **consonants** come together in a word you do not sound each one. You join them to make a new sound.

Directions: One of these letter combinations has been left out of each word. Decide which letter combination is missing and write the whole word.

18. di__
19. __ought
20. __urch
21. __eel
22. cla__
23. __irk
24. __imper
25. __ocolate

E. jump – jumps, jumped, jumping

You can add *s, es, ed,* or *ing* to a **base word** like *jump.* Sometimes you double the final consonant when you add these endings.

trip + ed = tripped
rub + ing = rubbing

The final consonant is often doubled when there is a single vowel just before the consonant.

Directions: Add the ending to each base word and write the new word.

26. moan + ed
27. hop + ing
28. groom + ing
29. meet + s
30. pass + es
31. tap + ing
32. bump + ing
33. despair + ed

5

EARLY DAYS of the MAIL

by Hanson Hart Webster

1 Today we take it for granted that the mail will be delivered daily at our door. But many years ago it might have been placed in a tree trunk or underneath a rock. In the early days of the mail no one could be sure about where—or when—it would arrive.

2 At the southern tip of Africa there was once a post office under a rock. In the old days the route from England to India was around the Cape of Good Hope. The journey was stormy and dangerous. It took six long months. Sailors often wished to send mail home, but they seldom met ships bound back to England. So at the cape the sailors would go ashore. They headed for a certain large stone. On the stone were scratched the words "Look hereunder for letters." They would leave their letters there, knowing that the next homeward-bound ship would stop and pick them up.

3 There was another post office like this at the southern tip of South America. During the gold rush days, boats sailed around Cape Horn to California. At Cape Horn was a keg nailed to a post. Boats coming from the east coast would send a small boat ashore to this post office. They

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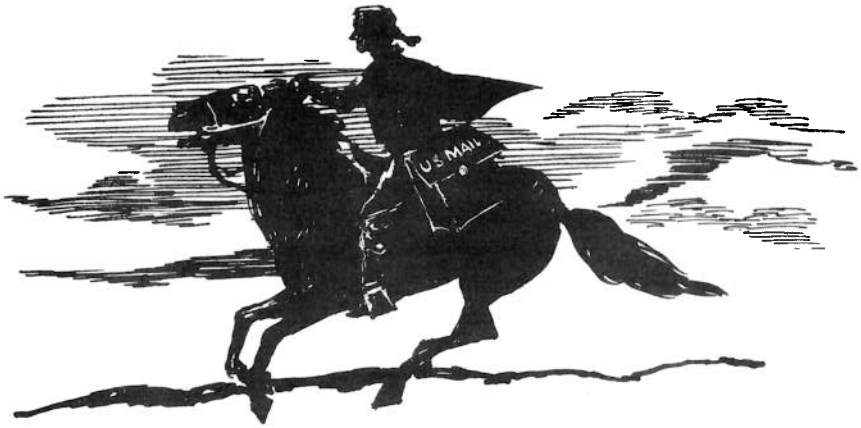


picked up any letters in the keg. At the same time they mailed letters home that boats sailing east could pick up.

4 In the state of Washington stands the stump of a huge cedar. It, too, was once a post office. Settlers needed a place for the mail carrier to leave their letters. Their houses were so widely scattered that the mail carrier could not reach all of them, and the post office was far away over rough roads. So the settlers found a tree that stood where several trails crossed. They cut the tree down ten feet from the ground, hollowed it out, and covered it with a roof. Inside, they nailed a row of wooden boxes. Each box was marked with a family's name. The mail carrier could leave letters there for everyone for miles around.

5 For the first few years after the English colonists came to America, there was no regular postal service. People gave their letters to any traveler who happened to be going in the right direction. Often they gave them to a peddler or a traveling shoemaker. When the traveler reached the town where the letter was going, he might stop at an inn. He would leave the letters there. But there they stayed until the person they were addressed to happened to come by and stop at the inn.

6 What about places like Virginia where there were very few inns? People who wished to send letters would leave them at one of the large plantations. The owner of the plantation would then send the letters on to a neighbor. The neighbor would do the same. It was a slow mail system.

7 After many years, regular mail carriers on horseback were hired. They went from one big town to another. Between New York and Boston, for example, there was one "post-rider" a month. He traveled only by day and took two weeks for the trip. Often the post-rider left all the mail for a whole town at a crossroads store. It still took many weeks for a letter to reach the person it was addressed to.

8 Finally, about two hundred years ago, Benjamin Franklin was made postmaster for all the colonies. His first act was to make a long journey to find out the best routes for carrying the mail. Then he set up a line of post stations between the northern and southern colonies. He ordered his postriders to travel by night as well as by day.

9 Franklin's postriders could carry more letters in a shorter time from one colony to another. The better service helped the young American colonies learn more about each other. They learned that they were all interested in the same things. This gave them the feeling of unity that later helped them win their independence.

10 In time, the nation set up its own government. But there were still only seventy-five post offices in the whole country. Between

cities along the coast, mail was sent in sailing boats. But most letters were carried from one post office to another in stagecoaches. Trips were made three times a week in summer and twice a week in winter. The stage stopped in all towns, large and small. It stopped fifteen minutes in a small town and two hours in a larger one. But still the people of the town might reach the post office too late to catch the stagecoach. Sometimes, too, the drivers forgot the mail or even lost it. It still took a week for news to go from Washington, D.C., to New York.

11 Today an airmail letter can travel across the world in much less time than that. A modern post office handles more mail in a day than the colonial carriers handled in a whole year. You know that the letter you send will go where you want it to go, and when.

HOW WELL DID YOU READ?

Did you read carefully?

1. **The instruction "Look hereunder for letters" was directed to sailors going**
   - **A** to England
   - **B** to India
   - **C** in either direction

2. **Cape Horn is located at the tip of**
   - **A** Africa
   - **B** India
   - **C** South America

3. **The post office at Cape Horn was a**
   - **A** keg nailed to a post
   - **B** large stone
   - **C** hollow tree stump

Did you understand why?

4. **Settlers in Washington needed a place for carriers to leave mail because**
   - **A** they had no other post office
   - **B** the carrier could not learn each family's name
   - **C** their houses were so widely scattered

What were the facts?

5. **Mail left at a plantation was passed on to**
   - **A** the next plantation
   - **B** the nearest inn
   - **C** a peddler or other traveler

6. **Franklin speeded up the mail service by**
   - **A** finding out the best routes
   - **B** having carriers travel night and day
   - **C** both **A** and **B**

7. **After the colonies became a nation, most mail was carried by**
   - **A** ships
   - **B** stagecoaches
   - **C** postriders

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. course to be traveled *(2)*
2. piece of land projecting into water *(2)*
3. small barrel *(3)*
4. people moving onto new lands *(4)*
5. oneness *(9)*
6. of present times *(11)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. trunk *(1)*
- **A** main stem of a tree
- **B** large box
- **C** long, flexible snout

8. tip *(2)*
- **A** tap
- **B** hint
- **C** end

9. bound *(2)*
- **A** related
- **B** headed
- **C** tied

10. post *(4)*
- **A** upright pole
- **B** mail
- **C** sentry's position

11. stage *(10)*
- **A** horse-drawn coach
- **B** theater platform
- **C** period of development

C. box check

When *x* ends a word it sounds like *ks*.
When *ck* ends a word it sounds like *k*.

Directions: Read the sentence and decide whether *x* or *ck* is needed to fill the blank. Write the word.

12. The clown performed a funny tri___.
13. He used his a___ to chop the wood.
14. The family had a midnight sna___.
15. The baby tried to li___ the sucker.
16. Can you fi___ this leaky faucet?
17. His car stalled on the tra___.

D. you will = you'll
I have = I've

Sometimes we put two words together and use an apostrophe (') to show where letters have been dropped. The new word is a **contraction.**

Directions: Decide which letter or letters have been left out of each contraction. Write the missing letters.

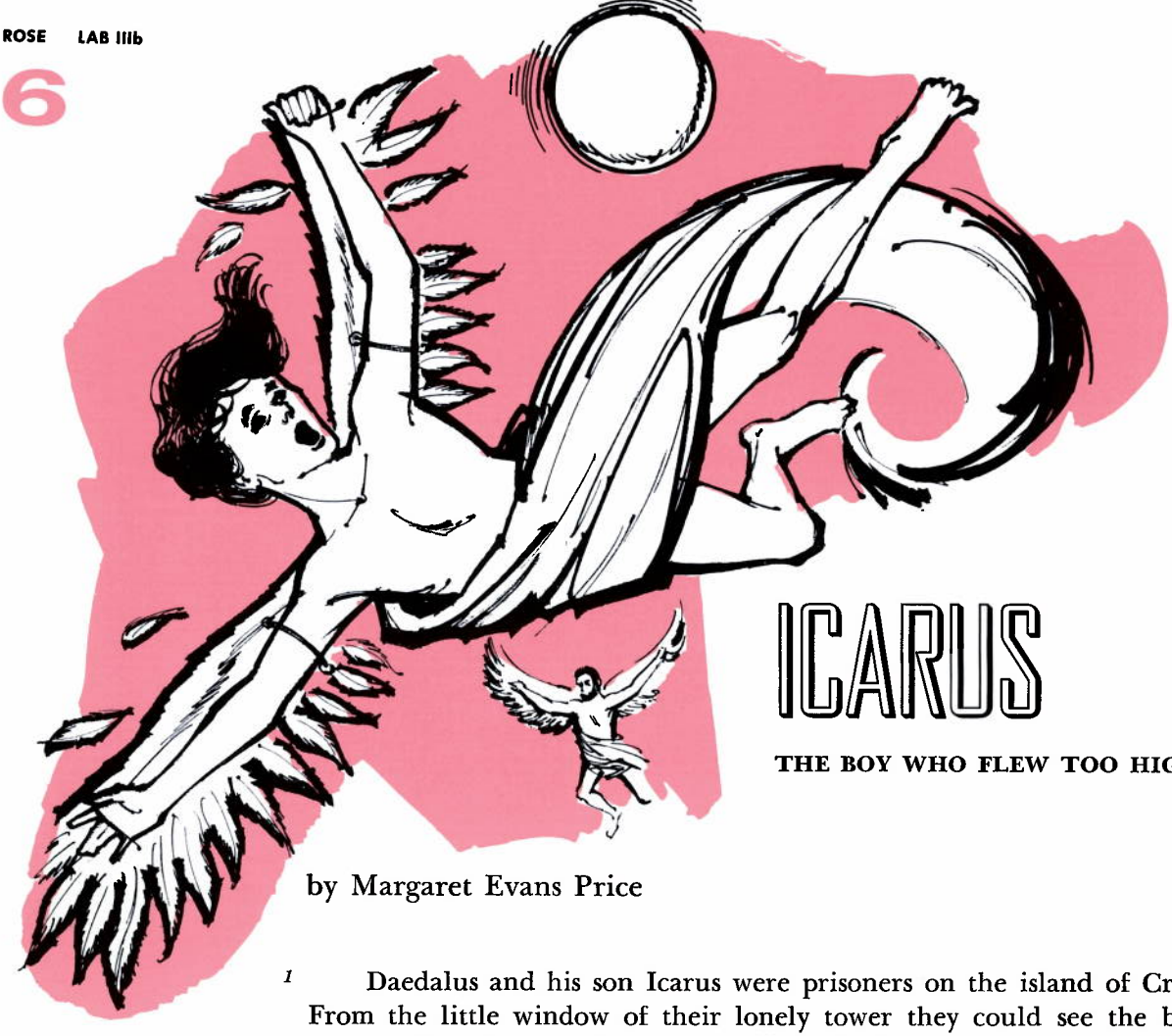
18. we've
19. mustn't
20. it's
21. they're
22. didn't
23. they've
24. wasn't
25. you're

E. *re* + pay = repay (pay back)
un + happy = unhappy (not happy)

The **prefixes** *re-* and *un-* can be added to many base words. *Re-* means "back" or "again," and *un-* means "not."

Directions: Add *re-* or *un-* to each of these words to make it fit the meaning given. Write the new word.

26. ___aware (not aware)
27. ___important (not important)
28. ___open (open again)
29. ___true (not true)
30. ___consider (consider again)
31. ___pleasant (not pleasant)
32. ___usual (not usual)
33. ___place (put back)



ICARUS

THE BOY WHO FLEW TOO HIGH

by Margaret Evans Price

1 Daedalus and his son Icarus were prisoners on the island of Crete. From the little window of their lonely tower they could see the blue ocean and watch the gulls and eagles sweep back and forth over the island. Sometimes a ship sailed out toward other lands. Seeing this, Daedalus and Icarus would long for freedom and wish they might sail away and never see the island of Crete again.

2 Daedalus was a famous Greek artist. He had designed the building where they were held prisoner. It was the famous Labyrinth, a winding maze of crisscross passages. Daedalus had designed it at the command of King Minos of Crete. When the Labyrinth was finished, the king was delighted. But he was afraid that someone might learn the secret of the maze; so he imprisoned Daedalus and Icarus in the tower.

3 At last Daedalus found a way for them to escape from the tower. But they had to hide themselves in the loneliest part of the island. They never found courage to go near the harbor where boats leaving Crete lay

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at anchor. They knew that King Minos would be carefully watching the coming and going of all ships.

4 As the days went by, Daedalus grew more lonely and miserable. He spent all his time watching the gulls fly freely about in the air. He never stopped wondering how he and Icarus might escape from the island.

5 Then, one day, Icarus found a dead gull. He brought the bird to his father.

6 "See how the feathers shine, and how long the wings are," said the boy.

7 Taking the bird in his hands, Daedalus turned it over slowly, examining the wings.

8 Icarus, laughing, said, "Now if only we had wings, we could fly away and be free."

9 His father did not answer for a long time. He sat silent, holding the dead bird. Now and then he looked up and watched the gulls as they wheeled in the air over the sea and the island. At last he said softly, "We shall have wings too."

10 After that, Daedalus was idle no longer. Plucking feathers from all the birds that Icarus could kill, he began to make two great wings. He fastened the feathers to a framework with melted wax and threads pulled from his linen robe.

11 When these two wings were finished, Daedalus bound them on himself. He rose into the air, waving his arms, now up, now down. Soon he was soaring far out over the water. Icarus, on the ground, jumped about in delight. He shouted to his father to come back and make another pair of wings so that they might fly away and leave Crete forever.

12 When he had finished a smaller pair of wings, Daedalus bound them on his son. Then he warned Icarus not to wander off alone in the air but to follow him closely.

13 "If you fly too low, the dampness of the sea will make your feathers heavy and you will sink into the water," said Daedalus. "But if you fly too near the sun, the heat will melt the wax and you will fall."

14 Icarus promised that he would heed his father's advice. They took off from the highest cliff on the island and flew away.

15 At first Icarus was obedient and followed close behind his father. But soon, in the great joy of flying, he forgot all that his father had told him. Stretching his arms upward, he went higher and higher into the heavens.

16 Seeing this, Daedalus called frantically for him to return. But Icarus could not hear his father, for the wind was so swift it carried

all sound away. Higher and still higher into the region of the clouds he flew. As he rose, the air about him grew warmer and warmer; but Icarus flew on, for he had forgotten his father's warning.

17 Suddenly Icarus saw feathers floating in the air about him. He remembered, too late, what his father had told him. The heat of the sun had melted the wax that held the feathers to the framework.

18 Icarus began to sink. He fluttered his wings wildly in an effort to fly. But the feathers were falling now in such a storm that Icarus could barely see. With a wild cry, turning and whirling through the sky, Icarus fell into the blue waters of the sea.

19 Daedalus heard his cry and flew to the spot. Nothing could be seen of Icarus or his wings but a few white feathers floating on the water.

20 Sadly the father continued his journey. Finally he reached the shore of a friendly island. But ever after he mourned his son, and never again did Daedalus try to fly.

HOW WELL DID YOU READ?

Did you understand the reasons?

1. **Daedalus was imprisoned in the Labyrinth because**
   - **A** his design for the building had not pleased the king
   - **B** he had disobeyed the king's commands
   - **C** he knew the secret of the maze

2. **The reason Daedalus did not leave the island right away was that**
   - **A** he had come to think of it as home
   - **B** few boats came near the island
   - **C** he was afraid of being recaptured

3. **Icarus brought the dead gull to his father in order to**
   - **A** show him how lovely it was
   - **B** encourage him to make wings
   - **C** see if it could be brought to life

4. **Icarus flew higher and higher because he**
   - **A** wished to see the sun close up
   - **B** was caught up in the joy of flying
   - **C** hoped to escape from his father

Did you read carefully?

5. **Icarus realized his mistake when**
   - **A** he heard his father call to him
   - **B** the air about him grew warmer
   - **C** feathers began to float past him

6. **Icarus would not have fallen if he had**
   - **A** flown near the water
   - **B** had a larger pair of wings
   - **C** followed Daedalus closely

7. **Because Icarus had died, Daedalus spent his life**
   - **A** mourning on his island prison
   - **B** improving the wings
   - **C** neither **A** nor **B**

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. desire greatly *(1)*
2. turned in a circular manner *(9)*
3. inactive *(10)*
4. pay attention to *(14)*
5. excitedly *(16)*
6. felt sorrow for *(20)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. sweep *(1)*
- **A** clean up
- **B** move smoothly
- **C** touch

8. part *(3)*
- **A** line dividing hair
- **B** theatrical role
- **C** region; area

9. free *(8)*
- **A** not busy
- **B** generous
- **C** not confined

10. follow *(12)*
- **A** go after
- **B** obey
- **C** imitate

11. spot *(19)*
- **A** place
- **B** fault
- **C** stain

C. cook + book = cookbook

A **compound word** is made up of two or more words that combine to have one meaning. *Cookbook* is a compound word because each of its parts is a word. *Cookies* is not a compound word because one of its parts is not a word.

Directions: There is one compound word in each sentence. Write the compound word and draw a line between the two words in it.

12. She has always eaten a good breakfast.

13. The policeman was cornered by the thugs.

14. The storehouse was nearly empty.

15. Send the important letters airmail.

16. The official inspected her passport.

17. He played the bagpipes expertly.

D. bl cl fl gl pl sl

These letters often come together in words as **consonant blends.**

Directions: A consonant blend has been left out of each word. Decide which of these blends is missing and write the whole word.

18. __imb

19. __ute

20. __ice

21. sam__e

22. thim__e

23. pur__e

24. ea__e

25. bicy__e

E. show how round

The letters *ow* have two sounds. Sometimes they have a long *o* sound as in *show*. Sometimes they sound like the *ow* in *how*. The letters *ou* may also sound like the *ow* in *how*.

Directions: Both words in each pair contain *ow* or *ou*. Sometimes they sound alike; sometimes they do not. If they sound the same, write *same*. If not, write *different*.

26. tower – follow

27. ground – cloud

28. brown – own

29. found – frown

30. gown – throw

31. out – owl

32. pillow – allow

33. sour – flow

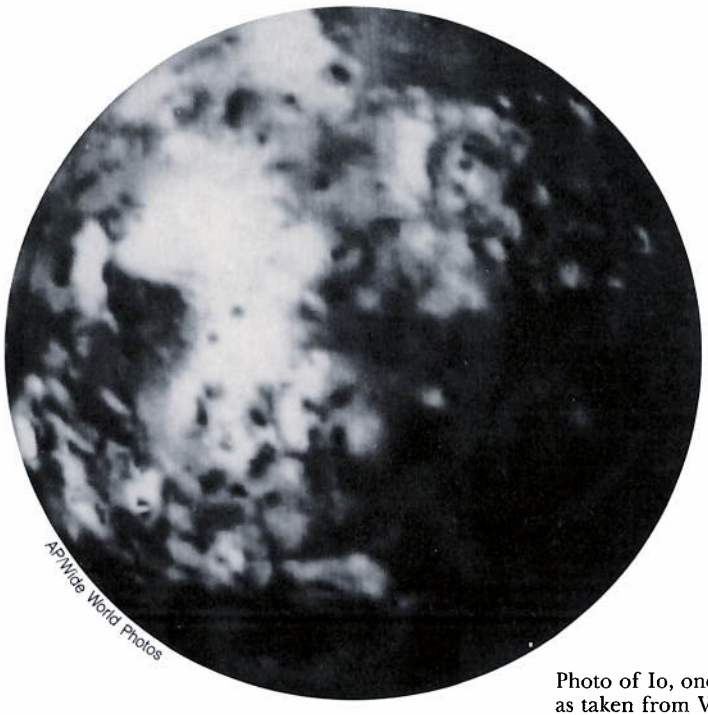

Photo of Io, one of Jupiter's moons, as taken from Voyager 1 on March 3, 1979

Incredible Io

by Inéz Castro

1 Scientists knew that Jupiter's moon, Io, pronounced Ī-ō, was a strange world. They had studied it from Earth. Now they would learn much more. On March 5, 1979, the spacecraft *Voyager 1* was approaching the moon; it was starting to send data back to Earth.

2 Some of the data was in the form of *pixels,* or picture elements. These were tiny parts of what would become a complete image. Devices on the craft sent them back to Earth as electrical signals. As the pixels came in, they formed, bit by bit, television pictures of what *Voyager* was "seeing."

3 When the first pictures of Io were complete, project members were surprised. "Io looks better than a lot of pizzas I've seen," said one.

4 Io did look like a pizza. Tomato-sauce red, it was splotched with pale cheese-yellow and ripe-olive black.

5 Io looked nothing like what scientists had thought it would. For one thing, they thought that Io was like Mars and Mercury, and like the Earth's moon; it should have craters. They knew that meteorites have bombarded

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Courtesy of Jet Propulsion Laboratory

Linda Morabito with the photo that solved Io's puzzle

Io for hundreds of millions of years. After all, they have bombarded every other body in the solar system. *Voyager* sent back pictures of other moons of Jupiter; these were densely cratered. What could have erased every trace of craters on Io?

6 Scientists had looked forward to answering many questions about Io. Instead, they were faced with still more questions.

7 The clue that helped solve the puzzle did not come from a scientist; it came from a navigation engineer. She had helped steer *Voyager* on its journey. Her name is Linda Morabito. When the first pictures of Io were shown, Morabito began tracking *Voyager*'s course; she used background stars as guides. She studied the images on a computer screen.

8 One special image showed Io from a distance of 4.5 million kilometers. Here Morabito began a search for a certain star. She knew it as a dim star; she adjusted the image to add brightness. What caught her eye was not the star; it was something very strange. She saw a huge, umbrella-shaped cloud over the surface of Io.

9 Morabito was stunned. She knew that Io has an odd kind of atmosphere. It could not contain water-droplet or ice-crystal clouds like Earth. It could not have even dust clouds like those on Mars.

10 She concluded that the cloud must be formed of particles and gases thrown upward in a volcanic eruption. But what an eruption! The cloud rose 280 kilometers over Io. It was far larger than any eruption that had ever occurred on Earth.

11 "I'd never seen anything like this before, and I suspected no one else had, either," she said later. She knew how important her finding might be to the *Voyager* project. If she had found a volcano in the act of erupting, it would show that huge changes were taking place on Io's surface. In the solar system, only Earth was known to change this way: Its crust was always being reshaped.

12 The next day, Morabito's co-workers looked at the strange image. They reached the same conclusion: The cloud was formed of materials thrown outward by a volcano. *Voyager* had caught a volcano on Io in the midst of a large eruption. The strange appearance of Io was caused by volcanoes.

13 Scientists knew that Io has large amounts of sulfur on its crust. Sulfur can be yellow or red or even black; this depends on the temperature to which it is heated before it cools into a solid. Clearly, the bright colors of Io's surface came from different forms of sulfur melted and spewed out by volcanoes.

14 Morabito's finding interested the scientists. They went back over the other pictures. At first they could see nothing in the computer pictures. But then they turned up the brightness on the screen. Soon they found another plume, and yet another. In all they saw eight volcanoes. All were throwing huge amounts of gas high over Io's tomato-red surface.

15 As more data came in, scientists began to determine what is happening on Io. The moon has a rocky core, like Earth's; the rock is hot enough to be liquid. Floating on the

rocky core is a solid rocky crust. Through cracks in this crust, melted sulfur and a gas known as sulfur dioxide escape during volcanic eruptions.

16 Imagine a volcanic eruption on Io. Melted sulfur, perhaps mixed with hot rock, gushes from the volcano; puddles of sulfur form out around the volcano. Meanwhile, clouds of sulfur dioxide rise high into the black sky. The sulfur dioxide cools and crystallizes; it drifts down as a fluffy white "snowfall."

17 This understanding of Io's changing surface would not be possible without Linda Morabito's finding. She was looking for one dim star. What she found was the answer to one of the most baffling puzzles of the *Voyager* project. What she found on that computer image has changed forever scientists' ideas about our solar system.

HOW WELL DID YOU READ?

Do you remember the details?

1. **Linda Morabito's job was to**
   - **A** help guide the *Voyager*
   - **B** study the stars in *Voyager* pictures
   - **C** ensure that *Voyager* functioned well

2. **In pictures of Io, scientists expected to find**
   - **A** volcanic eruptions
   - **B** a rocky crust
   - **C** meteorite craters

3. **The "snowfall" that scientists think drifts down from an erupting volcano on Io is formed of**
   - **A** sulfur dioxide
   - **B** melted sulfur
   - **C** ice crystals

Did you grasp the main idea?

4. **Io's incredible appearance is caused primarily by**
   - **A** meteorite craters
   - **B** different colors of sulfur
   - **C** volcanic clouds

Can you draw the right conclusions?

5. **In the solar system, the only two worlds that are known to have active volcanoes are Io and**
   - **A** Mars
   - **B** Jupiter
   - **C** Earth

6. **Scientists at first did not see volcanic clouds in pictures of Io because**
   - **A** the clouds were too faint to be seen
   - **B** there weren't any
   - **C** *Voyager* wasn't close enough

7. **Linda Morabito's discovery was important because it**
   - **A** showed that computers can be useful in studying pictures from space
   - **B** helped scientists understand the processes that shape Io's surface
   - **C** proved that there was sulfur on Io

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. information *(1)*
2. spotted; stained *(4)*
3. hit with great force *(5)*
4. tiny bits *(10)*
5. spit; vomited *(13)*
6. takes a solid form *(16)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. tracking *(7)*
- **A** observing the path of
- **B** leaving footprints on
- **C** traveling over

8. screen *(7)*
- **A** shielding device
- **B** net to keep out insects
- **C** display surface

9. forms *(13)*
- **A** shapes; outlines
- **B** kinds; types
- **C** printed documents with blanks

10. plume *(14)*
- **A** moving column of smoke or gases
- **B** something worn as an ornament
- **C** feather of a bird

11. core *(15)*
- **A** center part
- **B** principal meaning
- **C** memory bank

C. The letters *a, e, i, o,* and *u* are **vowels.** Long vowels say their names. Long vowels are found in words like

$\bar{a}$pe $\bar{e}$agle $\bar{i}$ce $\bar{o}$pen $\bar{u}$niform

Short vowels do not say their names. Short vowels are found in words like

$\breve{a}$pple $\breve{e}$lephant $\breve{i}$nk $\breve{o}$x $\breve{u}$ncle

When an accented syllable ends in a vowel, the vowel sound is usually long. When an accented syllable ends in a consonant, the vowel sound is usually short.

Directions: Look at the accented syllable in each word. Decide whether the vowel in the accented syllable is long or short. Write *long* or *short.*

12. de cide′
13. can′ vas
14. bu′ gle
15. re′ gal
16. con′ tact
17. lum′ ber

D. ch sh wh th

Usually, when these consonants come together in a word you do not sound each one. You join them to make a new sound.

Directions: One of these letter combinations has been left out of each word. Decide which letter combination is missing and write the whole word.

18. fi__
19. __ite
20. __ickly
21. cra__
22. __uckle
23. __oop
24. __arming
25. __rifty

E. jump — jumps, jumped, jumping

You can add *s, es, ed,* or *ing* to a base word like *jump.* Sometimes you double the final consonant when you add *es, ed,* or *ing.*

trip + ed = tripped
rub + ing = rubbing

The final consonant is often doubled when there is a single vowel just before the consonant.

Directions: Add the ending to each base word and write the new word.

26. repair + ing
27. drum + ed
28. gleam + s
29. skip + ing
30. zoom + ing
31. heat + s
32. crush + es
33. lump + ed

ONE OF THE MOST THRILLING EXPERIENCES OF MY CAREER WAS

The Day I Unpacked the Snakes

by Raymond Ditmars

1 At last the case had arrived at my house. Two sweating expressmen, carrying it at arm's length, had managed to get it to the upper floor. It wouldn't go through the door of the snake room. So they had left it outside.

2 Right after dinner, I started the unpacking. Everyone was excited about the snakes, but I insisted on doing it alone. I took a hammer and pry bar and went to work taking off the cover. My biggest worry was that I would find some dead snakes. Snakes can go for weeks without food, but some may need water. It's hard to supply them with water while they are being shipped. They may die of thirst.

3 Inside the case there were three trays loosely filled with straw. In the straw were burlap bags that held the snakes. Each bag was tagged with the name of the snake that was inside. There were cribos, a rat snake, tree snakes, tree boas, coral snakes, and two fer-de-lances. I had read about these snakes for so long and now I was going to see them.

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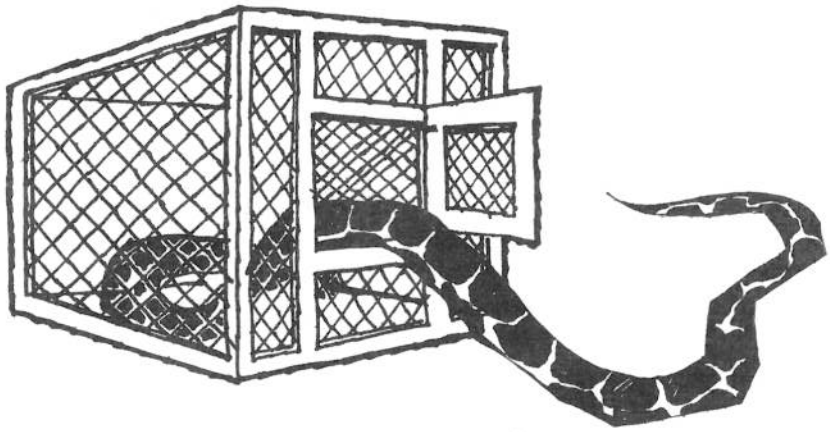

4 I lifted the top bags out of the straw and took them into my room. When I came back I lifted out the empty top tray. But I put it back quickly. The boas were out of their bags. One raised its head and stared up at me.

5 I went into my bedroom, got a bathrobe, and dropped it over the boas. That would probably keep them from striking at me. I wondered how I was going to get the big boa into the room by myself. But first I had to unpack the smaller snakes.

6 The rat snake, tree snakes, and tree boa gave no trouble. When I put them in their cages, they glided over to the water pans and drank long and deeply.

7 I lifted the beautiful coral snakes and the fer-de-lances into their cages with a piece of telegraph wire. Then I turned my attention to the boas in the hall.

8 The bigger one, I remembered, had looked up at me. That meant that it had something on its mind. Perhaps it intended to bite me. The bite of a large boa is not pleasant, but it isn't poisonous.

9 Shoving back the bathrobe with a staff, I uncovered the smaller boa. It was a beautiful creature, pale tan with markings of chocolate brown along the back. It was very gentle. While being lifted into its cage, it reared its head and gazed with interest around the room.

10 Nothing alarming happened when I took the bathrobe off the big boa. This was really a whale of a snake. Any zoo would have been proud to have it. I got the curved end of the staff under it and pulled up hard. A purplish forked tongue hung out as the creature looked around.

11 A yard of snake was resting on the side of the crate. Hoping this boa was gentle, I reached in and pulled out another yard of it. It didn't seem to mind, but it was so heavy I staggered under the load. Then I grabbed its middle and pulled the snake clear of the crate. Here was my chance to half drag and half carry it into the room.

12 Before I had gone two feet I was stopped with a jerk. The boa had twisted its tail around the upper post of the balustrade! My whole family came running upstairs. They were worried about me all alone with a case of snakes.

13 What they saw made them even more worried. Ten feet of serpent as thick as a fire hose stretched along the hallway. It was then that my father decided to show that snake who was boss.

14 He picked up the staff that was lying on the floor and gave the snake's powerful tail some sharp pokes. The snake was astonished. Its tail came loose from the banister and whipped through the air. It took me by surprise. I crashed against the swinging door and

into the snake room, wrapped up in boa. Luckily, the snake was so glad to get away from the hallway that it never thought about squeezing me.

15 My family yelled when they saw me stagger. But the real danger was over. The big fellow did not lose its temper. It glided willingly into its cage. I decided that this was an unusual boa. They couldn't all be so gentle. I discovered later that boa constrictors are all different. Some are gentle, some are snappy, and some are just mean.

16 I was proud of myself and my snake. But I was surprised at the way my family acted. They were nervous and upset. Perhaps it isn't so easy to have a snake collector in the house.

5. **The bite of a boa constrictor is**
   - A poisonous
   - B painful
   - C fatal

Can you draw the right conclusions?

6. **The author lifted the coral snakes with wire because they were**
   - A heavy
   - B sick
   - C poisonous

7. **The boa constrictor gets its name from**
   - A its beautiful markings
   - B its great size
   - C the way it squeezes its prey

HOW WELL DID YOU READ?

How carefully did you read?

1. **The arrival of the snakes was**
   - A a complete surprise
   - B an eagerly awaited event
   - C a worrisome problem

2. **Before he opened the case, the author's greatest fear was that**
   - A the wrong snakes might have been sent
   - B he might find some dead snakes
   - C some snakes might be loose

3. **The second boa was difficult to unpack because of its**
   - A weight
   - B temper
   - C fear

4. **When the family came upstairs, they found**
   - A all the snakes in their cages
   - B the author hitting the boa's tail
   - C a boa stretched out along the hall

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. took a firm stand *(2)*
2. need for water *(2)*
3. looked steadily at *(4)*
4. moved easily and flowingly *(6)*
5. moved unsteadily; reeled *(11)*
6. amazed *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. case *(1)*
   - A boxlike container
   - B victim of a disease
   - C window frame

8. staff *(9)*
   A building material
   B stick or rod
   C group of assistants

9. tongue *(10)*
   A way of speaking; language
   B flap beneath shoelaces
   C movable structure in the mouth

10. mind *(11)*
    A notice
    B obey
    C object

11. mean *(15)*
    A inferior
    B vicious
    C average

C. cook + book = cookbook

A compound word is made up of two or more words that combine to have one meaning. *Cookbook* is a compound word because each of its parts is a word. *Cookies* is not a compound word because one of its parts is not a word.

Directions: There is one compound word in each sentence. Write the compound word and draw a line between the two words in it.

12. Next, the silverware must be polished.
13. He needed a guidebook on his vacation.
14. That idea was just an afterthought.
15. Jerry built a bookcase for his room.
16. How about going for a horseback ride with me?
17. They had the bedroom painted lavender.

D. bl cl fl gl pl sl

These letters often come together in words as **consonant blends.**

Directions: A consonant blend has been left out of each word. Decide which of these blends is missing and write the whole word.

18. __ease
19. en__ose
20. __umbering
21. __ope
22. bu__e
23. com __ete
24. stum__e
25. re__ect

E. show how round

The letters *ow* have two sounds. Sometimes they have a long *o* sound as in *show*. Sometimes they sound like the *ow* in *how*. The letters *ou* may also sound like the *ow* in *how*.

Directions: Both words in each pair contain *ow* or *ou*. Sometimes they sound alike; sometimes they do not. If they sound the same, write *same*. If not, write *different*.

26. below – swallow
27. sound – drown
28. grown – flounder
29. spout – fowl
30. mount – shallow
31. ounce – fountain
32. about – slow
33. howl – pout

Danger—Keep Off!

by Frances Rogers and Alice Beard

1 The first lighthouses were bonfires atop high stone towers. The ancient Egyptians built high towers of stone and lit bonfires on them to send warning signals to passing ships. In the thousands of years since then, men have found many different ways of signaling from shore to sea.

2 The first man known to use a signal other than a bonfire used a chandelier. He was lord of a castle that stood near a rocky seacoast. He hung the chandelier, containing many large tallow candles, in the highest tower of his castle. Thus he warned passing ships of the danger along the coast.

3 Candles soon became the common fuel for signal lights. They were later replaced by oil lamps, which could burn longer and brighter. Kerosene and gas lamps were also tried. These are still in use now in some smaller lighthouses. But today most lighthouses send electric light blazing out over the sea.

4 The ancient fire signals could only say "Danger! Keep off!" But the

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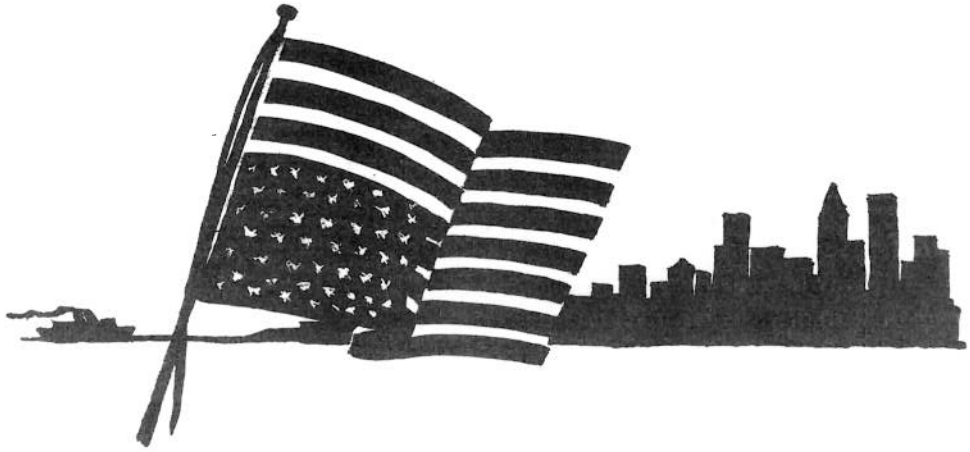

modern lighthouse also identifies itself, in a code known to all shipping. Most of the great lights have their own special signals. The light may be one that blinks—like a giant firefly in the night. Or it may be a revolving light that is red and then green. Or it may be only white. But whatever the signal, it is sent very regularly. A ship within its range is never at a loss to know which lighthouse it is, and where it is located.

5 The lighthouse just offshore is usually a fairly safe home. But in the wave-swept towers farther out, the keeper must live like a soldier. He or she must be ready to fight storms and high seas at any moment.

6 I once paid a visit to a lighthouse far offshore. It stood high on a mass of jagged rocks that rose up from the sea. As we rowed toward it, it looked terrifyingly small. The water stretched as far as the eye could see. And eleven miles of water stood between the island and shore. Usually the waters around the island were very rough. But on that day, luckily, the sea was calm enough for our party to land. Even then, our small boat had to be hauled up onto the tiny island by iron chains.

7 The keeper showed us around the tower. The walls were about three feet thick. They were built of solid rock. But he pointed out where, during a storm, the angry waves had flung a boulder weighing over a ton right through the heavy lighthouse door. The boulder was so large that it could not be moved out whole. First it had to be blasted into small pieces.

8 Wind and water use their might to batter the lighthouse. They also may endanger the life of the lighthouse keeper. One keeper who faced such danger was the man who guarded the light on Stepping Stone Island.

9 The island is so close to New York City that it can be seen from the top of the Empire State Building. The lighthouse keeper counted on trips to the mainland for his food and supplies. He was able to make these trips quite often.

10 But during the winter of 1934 a breath from the arctic regions swept over the waters. The thermometer dropped to fourteen below zero, and Stepping Stone Island was surrounded by a sea of ice.

11 Supplies at the lighthouse ran low. But the ice was not solid, so the keeper could not walk across it to the mainland. It was floating ice. It could easily trap and crush a small boat. Still, one day he set out for shore, trying to row his boat toward the mainland. He could not make any progress and gave up for the day.

12 The keeper tried the next day, and the day after that. Still he failed to find a path through the chunks of ice. Finally he grew

desperate, for now his cupboard was completely bare. There was only one thing to do. Praying that someone on shore would notice it, he hauled up the seaman's distress signal: the American flag hung upside down.

13 Some men on shore saw the flag flapping in the icy breeze. As soon as they saw its stars on the bottom, they knew something was wrong. Within minutes a police launch was sent crashing through the ice to aid the marooned keeper.

14 Even when weather is mild and seas are calm, the keeper's life is a hard one. It is dull and lonesome. Some lighthouses have neither radios nor phones. Often the only neighbors who come to call are sea gulls or other water birds. But the lighthouse keeper must remain alert and faithful. For today, as in centuries past, the light must be kept burning.

HOW WELL DID YOU READ?

Did you read carefully?

1. **The first warning signals to ships were used by the**
   - **A** Greeks
   - **B** Egyptians
   - **C** British

2. **The authors compared a blinking lighthouse to a**
   - **A** traffic light
   - **B** giant firefly
   - **C** train whistle

3. **The lighthouse visited by one of the authors was**
   - **A** far offshore
   - **B** on the mainland
   - **C** near the mainland

Did you understand why?

4. **The boat used on the lighthouse visit was able to land because the**
   - **A** water was unusually rough
   - **B** sea was calm
   - **C** boat was very large

5. **The keeper of Stepping Stone Island could not leave because of the**
   - **A** rough seas
   - **B** floating ice
   - **C** heavy snow

6. **The keeper's upside-down American flag brought immediate aid because it was**
   - **A** puzzling and unexplainable
   - **B** illegally displayed
   - **C** a standard signal for help

Can you draw the right conclusion?

7. **Today's lighthouse keepers find life dull because**
   - **A** the lighthouses serve little purpose now
   - **B** science has taken the danger from their job
   - **C** they live cut off from other people

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. hard, crude fat *(2)*
2. set of signals *(4)*
3. moving in a circle *(4)*
4. great strength *(8)*
5. trouble *(12)*
6. hundred-year periods *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. range *(4)*
- **A** cooking stove
- **B** area of influence
- **C** grazing land

8. fairly *(5)*
- **A** justly
- **B** clearly
- **C** moderately

9. bare *(12)*
- **A** uncovered
- **B** empty
- **C** plain; simple

10. wrong *(13)*
- **A** wicked
- **B** amiss
- **C** inaccurate

11. call *(14)*
- **A** shout
- **B** summon
- **C** visit

C. sell as

The letter *s* has two sounds. Sometimes it sounds like the *s* in *sell.* Sometimes it sounds like a *z,* as in *as.*

Directions: Say each word to yourself and decide which sound the *s* has. Write s or z.

12. easy
13. unseen
14. supply
15. please
16. doorstep
17. confuse

D. you will = you'll
I have = I've

Sometimes we put two words together and use an apostrophe (') to show where letters have been dropped. The new word is a **contraction.**

Directions: Decide which letter or letters have been left out of each contraction. Write the missing letters.

18. you've
19. isn't
20. can't
21. we're
22. that's
23. weren't
24. they're
25. doesn't

E. *re* + pay = repay (pay back)
un + happy = unhappy (not happy)

The **prefixes** *re-* and *un-* can be added to many base words. *Re-* means "back" or "again," and *un-* means "not."

Directions: Add *re-* or *un-* to each of these words to make it fit the meaning given. Write the new word.

26. __do (do again)
27. __just (not just)
28. __produce (produce again)
29. __usual (not usual)
30. __construct (construct again)
31. __equal (not equal)
32. __run (run again)
33. __claimed (not claimed)

10

Guideline

by Carolyn Gloeckner

1 Maria Elena Rosario kicked hard with her fins, sweeping her light over the walls of the underwater passageway. The source of the water rushing past her was a spring, one of many in central Florida.

2 The spring was unnamed and unexplored. In its depths a 5,000-year-old dugout canoe had recently been found. Dr. Rosario was part of a team of marine archaeologists who were studying the site. Three of them were diving with her—Mark Bradshaw, Wendell Elliott, and T. R. Price. Bradshaw and Elliott were experienced divers, although they had done little cave diving. Price, the head of the project, was a master cave diver. He had discovered the canoe. Under layers of silt he had found pieces of pottery and charred wood, proof that parts of the cave had been above water. The team planned to map and excavate the site.

3 Rosario had clashed with Price repeatedly over safety measures. Today she had insisted that each diver be equipped with three underwater lights. Price thought the precaution unnecessary.

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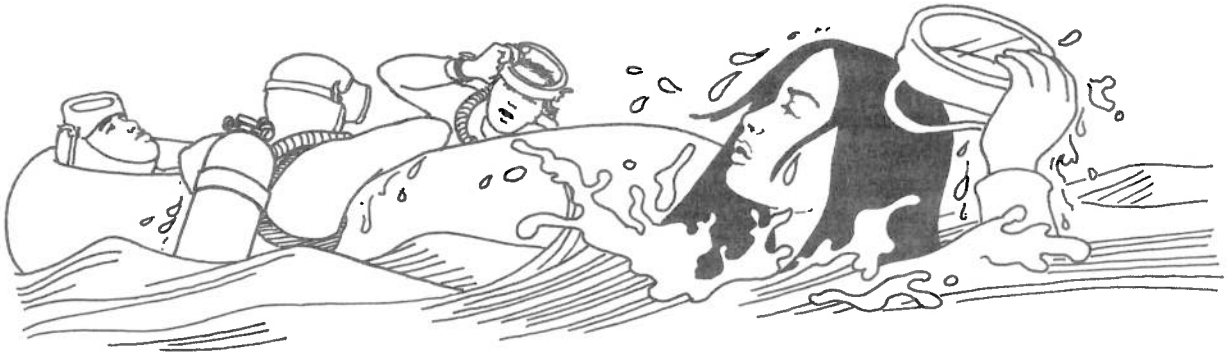

4 "Dr. Rosario, trust me, please," Price said. "People who are inexperienced with cave diving often have unreasonable fears."

5 "I have no such fears. I wish only to follow standard safety procedures," she had said. At the National Institute of Anthropology and History in Mexico City she had led dozens of cave-diving expeditions, without incident. She wondered about Price's record.

6 She inspected the white nylon guideline which led from the surface to the passageway where the canoe had been found. It had been tied off on projections along the cave wall. Without it, divers could become hopelessly lost in the maze of passageways.

7 Rosario's pulse quickened. The guideline was frayed! It showed signs of past repair!

8 She kicked off, planning to bring Price back and show him the bad section. Instead, she ran into Bradshaw. His tanks were tangled in the guideline; he was struggling to get loose. She saw, as if in a dream, the frayed line break. Pulled by the current, it swept past her. She swam after it and caught it.

9 Price drifted back to her. She handed him the broken end of the line. He knotted the lines, securing the repaired guideline with a tie-off. Then he and the other two began fighting their way up-current again. Rosario started to follow; then she changed her mind. She stopped and looked back.

10 In the glow from her light, she saw that beyond the mended tie-off, the guideline was gone. Price and the others bunched up near her. She pointed her light toward the tie-off; then she swept it down-current to show that the rope was missing.

11 Price motioned for the group to follow him. Elliott and Bradshaw did so eagerly. She followed more reluctantly, memorizing the twists and turns of the route he chose.

12 He led them on for ten minutes. Suddenly, the walls fell away. They had entered a large chamber—something they had not passed through on their trip in.

13 Dr. Rosario fought panic. She forced herself to breathe slowly. Then she flashed her light on each of the other divers. She motioned them to her.

14 They followed her back as she retraced Price's route. She found the place where the guideline had been swept away. There she began to study the wall for clues that would help her find the way. Here, the vanished guideline had worn a groove in the soft limestone. There, a bit of nylon floss clung to a knobby outcropping. She inched her way along, stopping to examine the most minute scrapes and scratches.

15 Suddenly Elliott, immediately behind her, knocked on her tank. She turned. He knocked on his chest with a fist; then he held out his hand to her, palm up. He was out of air.

16 She pondered for a moment before she handed him her regulator. He was bigger. If he refused to return it, she would die. Relief surged through her when he took a breath and handed it back. They would share her air until they reached the entrance to the spring, or until the air supply was gone.

17 Soon, Price was sharing his air with Bradshaw. Now, Rosario thought, it is a matter of perhaps ten minutes at the most. She switched off her light briefly. She could see no

hint of daylight ahead.

18 She switched it back on and proceeded. A minute later, she saw the missing guideline. It was loose and tangled, writhing on a tie-off ahead. And there was light!

19 Behind her, Price and Bradshaw saw it, too. They brushed by roughly. Seconds later Elliott broke away and kicked upward.

20 Rosario rose through the glass-clear water. Soon she felt the sweetness of sunlight on her face. She saw the other three lying on the raft, gasping. Price recovered first. He sat up and saw her looking at him. "Well, that was a close one, wasn't it?"

21 Maria Elena Rosario was too angry to answer.

HOW WELL DID YOU READ?

Do you remember the details?

1. **The discoverer of the dugout canoe was**
   - **A** T. R. Price
   - **B** Mark Bradshaw
   - **C** Maria Elena Rosario

2. **Dr. Rosario first became concerned about the guideline when**
   - **A** she saw that it was frayed
   - **B** Bradshaw broke it
   - **C** it broke the second time

Can you draw the right conclusions?

3. **Rosario argued with Price over how many underwater lights the divers should carry because she**
   - **A** didn't trust Price
   - **B** was concerned about safety
   - **C** wanted to prove she was an experienced diver

4. **The guideline was crucial to the safety of the divers because it**
   - **A** kept them in contact with each other
   - **B** prevented them from getting lost
   - **C** gave them something to hold onto

5. **Heading toward the canoe, the divers stroked strongly because they had to**
   - **A** reach the surface in a hurry
   - **B** stay close to each other
   - **C** swim against the rushing water

6. **Dr. Rosario blamed the near disaster of the divers on**
   - **A** Price's carelessness
   - **B** unusual conditions in the caves
   - **C** the inexperience of two of the divers

Do you remember when it happened?

7. **Of the following, the event that occurred last was**
   - **A** Price leading the other divers into a large chamber
   - **B** the breaking of the nylon guideline
   - **C** Dr. Rosario sharing her air with Elliott

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. dig to uncover *(2)*
2. care taken beforehand *(3)*
3. methods; ways of doing things *(5)*
4. worn to shreds *(7)*
5. thought carefully *(16)*
6. twisting about *(18)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. spring *(1)*
   - **A** supply of water
   - **B** season of the year
   - **C** elastic device

8. head *(2)*
   - **A** top or front part
   - **B** leader; chief
   - **C** topic or title

9. record *(5)*
   - **A** phonograph disk
   - **B** list of accomplishments
   - **C** written account

10. signs *(7)*
    - **A** motions
    - **B** printed notices
    - **C** traces; marks

11. chamber *(12)*
    - **A** enclosed space
    - **B** meeting hall
    - **C** board; council

C. cook + book = cookbook

A compound word is made up of two or more words that combine to have one meaning. *Cookbook* is a compound word because each of its parts is a word. *Cookies* is not a compound word because one of its parts is not a word.

Directions: There is one compound word in each sentence. Write the compound word and draw a line between the two words in it.

12. **He was removed from the payroll.**
13. **She entered the sickroom quietly.**
14. **He paved the driveway with cement.**
15. **A pipeline carried oil across the desert.**
16. **He drove rapidly along the highway.**
17. **Radios broadcast the news to the world.**

D. bl cl fl gl pl sl

These letters often come together in words as consonant blends.

Directions: A consonant blend has been left out of each word. Decide which of these blends is missing and write the whole word.

18. __ease
19. __isten
20. __ubber
21. re__y
22. par__ey
23. re__ect
24. __aim
25. __iff

E. feud few hue

The letter combinations *eu, ew,* and *ue* sometimes sound alike.

Directions: The words below contain *eu, ew,* or *ue*. Say each pair of words to yourself. If they contain the same sound, write *same*. If they contain different sounds, write *different*.

26. **flew — shrewd**
27. **sew — mew**
28. **barbecue — drew**
29. **guest — pursue**
30. **dew — pneumonia**
31. **renew — cue**
32. **museum — Europe**
33. **avenue — knew**

11

by Milton Lesser

A POEM PLUS DETECTIVE WORK LED TO

The Vanished City

1 When he was a boy Heinrich Schliemann read the *Iliad* of Homer, the poem that tells the story of the Trojan War. The *Iliad* tells how a powerful Greek king besieged the city of Troy for ten years and finally captured it.

2 The city fell twelve hundred years before the birth of Christ. Everyone else of Schliemann's day took the Trojan War to be just a story. But to Schliemann, the battles and the heroes and the city itself were as real as if they had vanished only yesterday.

3 He did not forget Troy. Years later he went to search for it. If it ever existed, he knew it must have been on the northwest coast of Turkey.

4 Schliemann's first stop was a small town on the Turkish coast. It was said by some to be the site of ancient Troy. He had taken along his copy of Homer's poem. He used it as a guide to find a likely place for the site of Troy.

5 A day's exploration convinced him that this was not the spot. "It could not have been here," he reasoned. "The Greeks who laid siege to the city could not have traveled back and forth to their ships as easily as Homer says they did."

6 So Schliemann went back to the coast and headed north. He saw the plain of Troy stretching out to the sea. Close to the sea was a mound.

7 "Now," thought Schliemann, "if I were king of Troy, I would build my city there. It could stand a siege of ten years, as Homer says."

Adapted from LOST WORLDS AND THE MEN WHO FOUND THEM *by Milton Lesser.*
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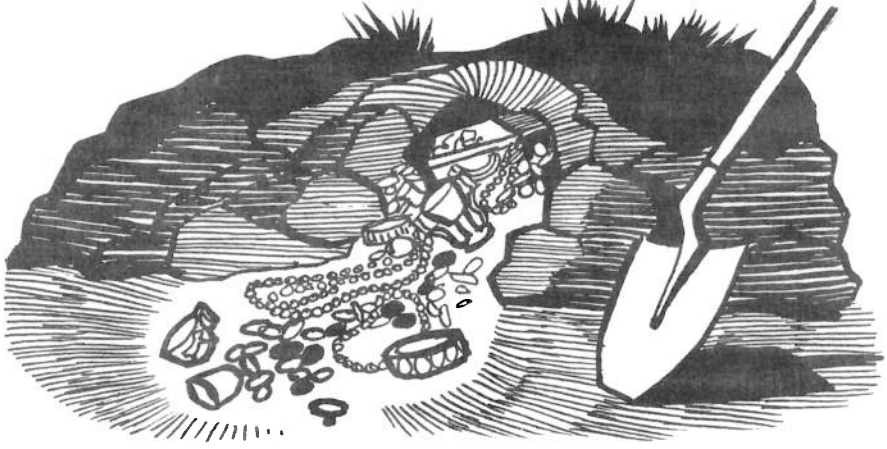

8 But Homer mentioned that there were a spring of ice water and a spring of boiling water near Troy. Schliemann could not find these no matter how hard he searched. He talked it over with a man named Calvert, who lived on the mound.

9 "Did you know," Calvert asked him, "that this part of Turkey used to be a volcanic region?"

10 "No," Schliemann replied impatiently. "But what has that to do with it?"

11 "Just this. In volcanic regions, springs have a way of appearing suddenly and vanishing just as suddenly. Homer may have been right, but that doesn't mean that the springs must still be flowing," Calvert explained.

12 Schliemann's excitement mounted. The next morning the two men were up early. They walked to the foot of the mound and began to pace off distances. The mound measured three miles around its base. It was about eight hundred feet high.

13 "About right for a good-sized palace," Calvert said. "Good luck to you, Schliemann. I know you're going to start digging right away."

14 That is exactly what Schliemann did. He kept at it from 1870 to 1873. Recklessly he squandered his fortune for the dream of Troy.

15 Almost from the first, the earth yielded remnants of a city long dead. The diggers found household furnishings, ornaments, and weapons of all sorts. But Schliemann was in for a surprise.

16 After the workers had dug a short way into the mound, it became clear that not one city but two were built on the same spot. One had risen over the ruins of the other. More digging revealed that it was not two cities, but three.

17 This was a discovery of the greatest importance. Schliemann became world-famous almost overnight. The dream was reality. The digging continued until at last *nine* cities were exposed.

18 But Schliemann was not content. He had come to find the Troy of Homer. How could he tell which of the nine cities was the one of his dream?

19 Schliemann went back to the copy of Homer that he always carried with him. For the thousandth time he read the description of Troy. According to the poem, Priam, the king of Troy, had had a vast store of gold and jewels and ivory.

20 "If I could find the treasure," Schliemann thought, "then I would know that I had found Troy." Each day he went excitedly to the diggings. But no treasure was unearthed.

21 Discouraged, Schliemann went to the diggings one last time. The next day the

workmen would leave. Troy would go back to its centuries-old sleep.

22 Suddenly a tiny glitter caught Schliemann's eye. He leaped into the deep trench the workmen had made. He chipped away at the hard earth. The glitter increased to a glow. Soon a shower of gold and ivory tumbled out of the earthen wall. "Priam's treasure!" he whispered.

23 Schliemann went on with his excavations in other parts of the Mediterranean coast. We know today that he did not find the treasure of Priam. The treasure he found belonged to a king who lived long before the Trojan War. But he did find Troy. His unshakable belief in Homer's poem had been rewarded. It paved the way to other thrilling discoveries based on the legends of the Mediterranean lands, where Western civilization was born.

HOW WELL DID YOU READ?

Did you understand?

1. **The events described in the *Iliad* occurred**
   - **A** when Schliemann was a boy
   - **B** ten years before Schliemann's birth
   - **C** thousands of years before Schliemann's search

2. **Schliemann began his search because he felt that the story of Troy was**
   - **A** exaggerated
   - **B** skillfully written
   - **C** true

What were the facts?

3. **Schliemann knew that the first place he visited was not Troy because it was too**
   - **A** far from a harbor
   - **B** close to the coast
   - **C** far north

4. **The fact that the plain of Troy lay in a volcanic area explained why the**
   - **A** city of Troy was not visible
   - **B** flowing springs described by Homer had disappeared
   - **C** strange mound had appeared on the plain

5. **Schliemann thought that he had found Homer's Troy when he discovered the**
   - **A** remains of a buried city
   - **B** horde of treasure
   - **C** second of the nine cities

Can you draw the right conclusions?

6. **Schliemann made his discovery by**
   - **A** talking often with experts
   - **B** using his vast knowledge of Turkey's geography
   - **C** following Homer's descriptions exactly

7. **Since Schliemann's discovery, people are more likely to**
   - **A** read the *Iliad*
   - **B** enjoy the *Iliad*
   - **C** believe the *Iliad*

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. hemmed in by armed forces *(1)*
2. place; location *(4)*
3. rose; climbed *(12)*
4. spent carelessly *(14)*
5. traces; leftover pieces *(15)*
6. diggings *(23)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. fell *(2)*

A took place
B dropped
C was captured

8. stop *(4)*

A finish
B place stopped at
C something that stops

9. spring *(8)*

A leap forward
B season after winter
C flow of water

10. base *(12)*

A lowest part
B goal
C headquarters

11. fortune *(14)*

A chance; fate
B success
C wealth; riches

C. The letters *a, e, i, o,* and *u* are **vowels.** Long vowels say their names. Long vowels are found in words like

ā**pe** ē**agle** ī**ce** ō**pen** ū**niform**

Short vowels do not say their names. Short vowels are found in words like

ă**pple** ĕ**lephant** ĭ**nk** ŏ**x** ŭ**ncle**

When an accented syllable ends in a vowel, the vowel sound is usually long. When an accented syllable ends in a consonant, the vowel sound is usually short.

Directions: Look at the accented syllable in each word. Decide whether the vowel in the accented syllable is long or short. Write *long* or *short.*

12. re′ print
13. bot′ tle
14. trot′ ted
15. lift′ ing
16. bi′ cycle
17. pa′ tience

D. ch sh wh th

Usually, when these **consonants** come together in a word you do not sound each one. You join them to make a new sound.

Directions: One of these letter combinations has been left out of each word. Decide which letter combination is missing and write the whole word.

18. ri__
19. sun__ine
20. __orough
21. __ich
22. flin__
23. reli__
24. __irty
25. wa__

E. jump – jumps, jumped, jumping

You can add *s, es, ed,* or *ing* to a **base word** like *jump.* Sometimes you double the final consonant when you add *es, ed,* or *ing.*

trip + ed = tripped
rub + ing = rubbing

The final consonant is often doubled when there is a single vowel just before the consonant.

Directions: Add the ending to each base word and write the new word.

26. grass + es
27. doom + ed
28. steam + ing
29. slap + ed
30. beat + s
31. loan + ed
32. clump + ing
33. stop + ing

If you enjoyed reading the Rose Power Builders,
you might also enjoy the following Literature Selections:

1. *The Face on the Laundry Room Floor*
2. *Harrison Bergeron*
3. *A Wagner Matinee*

AN ANCIENT FOOD IN MODERN FORMS

MILK

by Grace H. Glueck

1 Milk was a basic food of ours long before history was written. It will probably keep on being one as long as there are animals that give milk.

2 Even the word *milk* is very old. It comes from Sanskrit, one of the oldest languages known. A picture of milking has been found in the ruins of an ancient city. It was drawn about 3500 B.C. Milk is often mentioned in the Bible. For example, there is the famous description of Canaan as a land "flowing with milk and honey." "Flowing with milk and honey" is an expression that means "rich in things to eat." This shows what an important food milk was thought to be in ancient times.

3 Many ancient people also thought that milk had great healing power. One of the most famous Greek doctors told his patients to drink milk to cure illness. The Romans rubbed bread soaked in milk on their faces. They thought that this would make their skin paler. They also thought it would keep their beards from growing! The wife of one emperor of Rome took a milk bath every day. She believed this would improve her health and beauty. She kept five hundred animals to make sure of having enough milk each day.

4 In the Middle Ages in Europe, milk was still popular as a medicine.

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At first it was thought that the most powerful healing part of milk was the *whey,* the watery part. Later, milk sugar, or *lactose,* was thought to be better. Proof that milk was very popular in England can be found in the writings of William Shakespeare. He mentioned milk about seventy-five times in his plays.

5 When the first colonists sailed for America, they made room for cows on their crowded ships. Both of the earliest American colonies, at Jamestown and at Plymouth, had small dairy herds. As the country grew, the size of its dairy herds grew also. By 1650 many families owned herds of one hundred or more cattle.

6 For more than two hundred years most people got their milk from their own cattle or from a nearby dairy herd. But in time new inventions made the dairy industry a big business. In 1851 Gail Borden, founder of a milk company, found a way to take some of the water out of milk. This made it keep much longer. Four years later, Louis Pasteur introduced the pasteurization process. This process killed the bacteria in milk that caused it to spoil. Next, a special milk bottle was designed. This was followed by the invention of machines that could fill bottles and cap them automatically.

7 These discoveries had a great effect on the dairy industry. They meant that milk could be stored longer. It could be safely shipped over long distances. Preparing and distributing milk soon became a large-scale business. As recently as 1984, more than twenty-five billion quarts of milk were sold in the United States.

8 Milk comes in many forms. It is often sold *homogenized.* This means that it has been specially treated to break up the fat and mix it all through the milk. Milk also comes *fortified, concentrated, condensed, evaporated, frozen,* or *dried.* There is *soft curd* milk, in which the curd, or solid part, is softened to make it easier to digest. There is *skim* milk, from which most of the fat has been removed. And there is *buttermilk,* which is the by-product formed when sour cream is churned into butter. Finally, there is *yogurt,* whole milk that has been partly evaporated and then fermented by bacteria.

9 Just what do all these milk products give to the people who use them? Milk is about 87 percent water. But the solid part that remains is rich. It contains all the vitamins known to be needed by humans. Milk protein, milk sugar, calcium, phosphorus, and iodine also help make up that important 13 percent.

10 Milk, it is agreed, is nourishing. It also has many unexpected uses. *Casein*—the fine, white particles found in milk—is used in making paints. A strong wood glue is also made from casein. Casein gives a glossy coating to fine book and magazine paper. The cord fabric of auto tires is also coated with casein. This helps to keep the tires from overheating.

Casein was one of the first materials used to make plastics. Buttons, buckles, and some costume jewelry are still made from it.

11 Another milk magician is *lactic acid.* It is used for tanning and dyeing leather, and for dyeing cloth. It is also used in three very different products—medicines, soft drinks, and insect poisons!

12 Once, a surprising use was discovered for skim milk. An ice skating rink was flooded with it. Skaters found that when it froze it chipped less easily than frozen water.

13 Some people believe that milk drinking will become less popular in America than it has been. But remember how long milk has been a basic food and think of the many ways in which it is useful. It seems safe to say that the milk industry will always be important.

HOW WELL DID YOU READ?

How well do you reason?

1. **The fact that a picture of milking was found in some ancient ruins shows that**
   - **A** people began to milk animals long ago
   - **B** the people of that city were quite modern
   - **C** milking is older than art

When did it happen?

2. **Milk became a big business when**
   - **A** the colonists came to America
   - **B** industry found new uses for it
   - **C** new inventions were applied

How exact was your reading?

3. **Gail Borden discovered a**
   - **A** way to remove some water from milk
   - **B** machine to cap and fill bottles
   - **C** way to kill certain bacteria in milk

4. **Pasteurizing milk and condensing milk both make milk**
   - **A** taste better
   - **B** keep longer
   - **C** digest faster

5. **More than one half of a glass of homogenized milk is**
   - **A** fat
   - **B** vitamins and minerals
   - **C** water

6. **Casein is important in the making of**
   - **A** insect poison
   - **B** paints
   - **C** soft drinks

7. **The use of milk in medicines**
   - **A** was popular only during the Middle Ages
   - **B** began in colonial days
   - **C** continues in modern times

Can you apply what you read?

8. **Little Miss Muffet "eating her curds and whey" was dining on**
   - **A** a by-product of buttermaking
   - **B** milk in which the fat was broken up
   - **C** the solid and liquid parts of milk

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. necessary *(1)*
2. of times long past *(3)*
3. liked by most people *(4)*
4. strengthened; enriched *(8)*
5. contributing to health *(10)*
6. shiny *(10)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. drawn *(2)*
- **A** pulled
- **B** sketched
- **C** attracted

8. forms *(8)*
- **A** shapes
- **B** states
- **C** patterns

9. easier *(8)*
- **A** slower
- **B** simpler
- **C** more comfortable

10. rich *(9)*
- **A** wealthy
- **B** plentiful
- **C** nutritious

11. different *(11)*
- **A** unusual
- **B** various
- **C** not similar

C. Words are arranged in **alphabetical order** in the dictionary.

all
big
camel

Directions: Read the words in each line. Write the word that would come first if they were put in alphabetical order.

12. pedal, doorstep, brain, every
13. labor, private, orange, major
14. cake, level, opposite, breeze
15. building, angular, grill, drown
16. imprint, hundred, kindle, leopard
17. subject, never, lion, opportunity
18. timber, mail, raise, simple

D. When words begin with the same letter, you need to look at the second letter to see whether they are in **alphabetical order.**

sa dden
se arch
su pply

Directions: Read the words in each line. They are not in alphabetical order. Write the word that is out of order.

19. only, ogre, oh, open
20. deadly, dreadful, diet, door
21. gave, grieve, glove, goes
22. bunny, baby, book, braid
23. terror, trial, tumble, tartan
24. fifty, forty, fun, fat
25. able, attack, also, assume
26. stand, sample, simple, spear

E. When the first two letters of words are alike, you need to look at the third letter to put the words in **alphabetical order.**

gra pe
gri n
gro w

Directions: Read the words in each line. Write the word that should come last in alphabetical order.

27. church, charity, chest, chore
28. high, hippo, hitch, hint
29. whose, whistle, where, what
30. paper, pattern, past, pare
31. toward, top, tom, tomato
32. redone, receive, reason, regress
33. school, scarf, scribble, scent

2

COVER GIRL

by Rosalie Koskenmaki

1 Is beauty really only skin deep? What's behind those lovely faces on the magazine covers?

2 In the case of Beverly Johnson, international model-extraordinaire, behind the photogenic face and figure there lives a spunky, disciplined woman

Photograph by Eric Bowman. Courtesy VOGUE. Copyright © 1981 by The Condé Nast Publications Inc.

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with intelligence, flair, and talent. Johnson says it was her professionalism that took her to the top.

3 *Time* magazine called her "perhaps the most successful black model in history." Beverly, however, does not see herself as a black model. She sees herself as a model who "happens" to be black.

4 At the height of her success, a radio talk show host said that she was surely the biggest black model in the world. Beverly replied, "No, I'm not. I'm the biggest model—period. I've been in the business four years. There's not a model, black or white, who's done what I've done in such a short time. It's so, and I think I should say it."

5 She feels her success "has nothing to do with black or white; it has to do with professionalism." She says that models who complain of unfair treatment in the high-fashion industry are often the same models who don't show up for bookings, who are sulky and uncooperative. They are the ones who expect editors, photographers, and designers to bend the rules just for them. They make their own tough luck, she says.

6 Francesco Scavullo, a highly successful high-fashion photographer, said of her: "A lot of models are temperamental, but Beverly always turns it out the best she can." Scavullo is also the one who said, "She's smashing; her face is full of energy, excitement, life."

7 Where does a face like that come from?

8 Born in Buffalo, New York, Beverly owes her stunning good looks to her parents: her father is part Blackfoot Indian and her mother has Louisiana Creole blood. For years, however, Beverly felt she took second place in the looks department at home: "I was tall and awkward," she says. "My little sister was the beauty. She had all the boyfriends. I was into sports."

9 As a teenager, her goal was to make the U.S. swimming team for the 1968 Olympics in the 100-yard freestyle: she just missed qualifying. When she left home for college, modeling was the last thing on her mind; she wanted to be a big-time lawyer. A fine student, she enrolled in Boston's Northeastern University on a full academic scholarship.

10 People were always saying to her, "You're so beautiful. You should be a model." So, in June 1971, after finishing her first year of college, she went to New York chaperoned by her mother.

11 Instead of taking the usual paths through the Big Apple's modeling maze, she went straight to *Glamour* magazine. After her first interview, she was told, "You're just what we are looking for!" In the next two years, she was featured on *Glamour*'s cover six times.

12 Beverly asked Eileen Ford, head of one of New York's top model agencies, about the possibility of doing a *Vogue* cover. Ford said, "Don't count on it. Stick with *Glamour*."

13 The editors at *Vogue* had never put a black woman on the cover simply because they hadn't found a black model they felt looked like she belonged on a *Vogue* cover. "The girl on the cover of *Vogue* must be very good-looking as opposed to being eccentric," says a *Vogue* editor. "She must have a very modern, very racy, very strong and very American kind of look." It seems Beverly had "it." In August 1974, she made history when she became the first black model to appear on *Vogue*'s cover. That issue sold out in four days; it set a record for magazine sales. In June of the next year she appeared once again on *Vogue*'s cover.

14 Beverly had arrived. More covers followed. Then came TV commercials, awards, runway modeling, talk shows. She could pick and choose from among modeling jobs, and she could get top rates. With an income in six figures, Beverly started saving 25 per cent of her earnings at the age of twenty-three; modeling is not a field with a lot of job security.

15 When her daughter, Anansa, was born, Beverly took a two-year leave from work to be with her. In 1981, she published *Beverly Johnson's Guide to a Life of Health and Beauty* because

so many women had written her asking for beauty tips. In 1983, she returned to the New York modeling scene; her name is still a byword there. In addition to a heavy modeling schedule, she gives some time to charities and a lot of time to Anansa. Beverly is still pursuing her interests in singing and acting. She has cut one record album and has appeared in several films, including "Ashanti," with Michael Caine.

16 What's the secret of her success? Beverly says it's professionalism, hard work, and something she learned from her years as a swimmer: "If you look around to see where everyone else is going, you lose the race. The trick is to keep swimming."

HOW WELL DID YOU READ?

Did you understand the character?

1. **Beverly feels her success is due mainly to**
   - **A** good luck
   - **B** the right contacts
   - **C** professionalism

2. **According to the story, Beverly can best be described as**
   - **A** shy and modest about her accomplishments
   - **B** outspoken and honest about herself
   - **C** uncomfortable with her success

Can you draw the right conclusions?

3. **Beverly was chosen for the *Vogue* cover because**
   - **A** *Vogue* wanted a black woman on its cover
   - **B** she had the face *Vogue* was looking for
   - **C** Eileen Ford recommended her to *Vogue*

4. **Beverly's philosophy can be summed up as**
   - **A** "Diligence is the mother of good luck."
   - **B** "All is luck or ill-luck in this world."
   - **C** "Behind bad luck comes good luck."

How carefully did you read?

5. **After her first year at Northeastern, Beverly went to New York to**
   - **A** attend another university
   - **B** look for modeling jobs
   - **C** train for the Olympics

6. **The "Big Apple" refers to**
   - **A** New York City
   - **B** Boston
   - **C** Buffalo

7. **According to the story, Beverly's first goal was to become a**
   - **A** high-fashion model
   - **B** big-time lawyer
   - **C** champion swimmer

Did you understand why?

8. **According to the story, Beverly started saving 25 percent of her income because she**
   - **A** knew that modeling was not secure work and she couldn't do it forever
   - **B** wanted one day to travel extensively with her daughter
   - **C** felt that some day she would want to stop modeling and become a lawyer

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. looks good in photographs *(2)*
2. engagements; jobs *(5)*
3. relating to formal study *(9)*
4. escorted; accompanied *(10)*
5. unusual; strange *(13)*
6. engaging in; following *(15)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. model *(2)*
- **A** a miniature of something
- **B** one who wears clothes to display them
- **C** a type or design of a car or plane

8. height *(4)*
- **A** highest point
- **B** distance from the bottom to the top
- **C** condition of being tall

9. issue *(13)*
- **A** outcome
- **B** topic
- **C** publication

10. figures *(14)*
- **A** numerals; digits
- **B** bodily shapes; forms
- **C** diagrams; pictures

11. tips *(15)*
- **A** pointed ends
- **B** light touches or blows
- **C** items of information

C. br cr dr fr gr pr tr

Often two consonants come together in a word to make one sound. This is called a **consonant blend.**

(br) awny
a (cr) oss

Directions: A consonant blend has been left out of a word in each sentence. Decide which of these blends is missing and write the whole word.

12. That is an im__actical suggestion.
13. Try this picture in the __ame.
14. Jill told me a se__et.
15. Seven eggs broke when the bag __opped.
16. Few women bake their own __ead today.
17. These bins are for storing __ain.
18. The star made a grand en__ance.

D. sc sw sp st

These letters often come together in words as **consonant blends.**

Directions: A consonant blend has been left out of each word. Decide which of these blends is missing and write the whole word.

19. twi__
20. __eam
21. __imming
22. __em
23. __inning
24. whi__er
25. hi__ory
26. __old

E. Sometimes the letters *re* and *un* are **not prefixes.** Then they are part of the base word.

rewrite, replace
rest, rented

In *rewrite* and *replace, re-* is a prefix. It has been added to the base words to mean "again" or "back." In *rest* and *rented,* the letters *re* are not a prefix. They are part of the base word.

Directions: In some of these words the letters *re* and *un* are prefixes. In some they are not prefixes. If there is a prefix, write **P**; if there is no prefix, write **N.**

27. uncover
28. remake
29. ready
30. reproduce
31. unsung
32. unify
33. reason

3

Riding the Blue Colt

by Ralph Moody

1 Hi walked slowly toward the blue colt. He kept easy-talking as he slipped the saddle over the colt's back. His voice sounded like water running over stones in a brook.

2 White was showing around the blue's eyes, and every muscle under his dripping hide was pulled tight. He looked as if he might explode any second. My chest hurt, and I realized I was holding my breath.

3 At last Hi hitched up his belt, wrapped the hackamore rope round his hand, and eased into the saddle. The colt stood for maybe ten seconds, and Hi sat just as still. Then the colt shot off as if a trigger had been pulled somewhere inside him. He didn't buck straight out, and he didn't spin or circle—his first leap took his front hoofs ten feet off the ground, and they came down hard. He bounced to the right, smashed down, snapped to the left, and went up again like a geyser. He crashed against

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the poles at the far end of the corral, wheeled, and rushed across the ring. He had changed his stride to a chop, and Hi's head was snapping like a ball on a string.

4 Nothing alive could have stood that pace long, so it probably wasn't more than a minute before the blue rocketed, crashed down, and stood trembling. Hi's face and neck were swollen and red, but he stroked the colt's neck and talked to him. His voice hadn't changed a mite from the way it sounded before he got on.

5 Sweat dripped off the roan like rain from the roof of a house, and his sides pumped in and out. I watched the quiver in his withers grow less and less. Then he moved a foot forward. He took another step, and another, making a nervous circle of the corral.

6 After a couple of rounds Hi motioned Mr. Cooper to open the outside gate. The colt shot through the opening. It might have been ten minutes before they came back, and then it was easy to see there had been an understanding between Hi and the colt.

7 Hi must have had the rest of it all planned out with Ted Ebberts, because when he slipped out of his saddle, Ted took it to the barn and came back carrying mine. When he laid my saddle by the gate, I knew it was my time to ride.

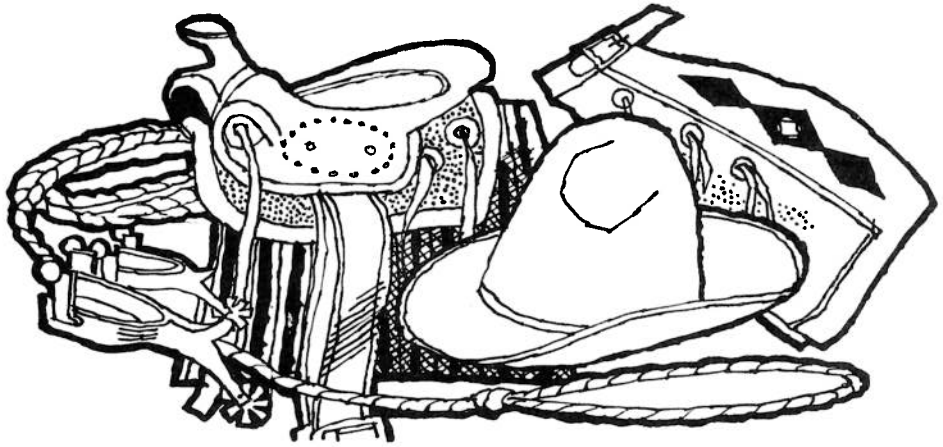
8 Mr. Cooper asked me if I was scared, and I lied to him. "No, not a bit," I said, but I was shaking inside. I never knew a horse could buck like that blue. I knew I'd go off at the first thud if he did it again. I wasn't so much afraid of falling off outside where a horse could run away, but it seemed as though I would surely get trampled if I went off in that little corral.

9 Hi gentle-talked the colt and stroked his head while Mr. Cooper and Ted fastened my saddle onto him. Then he motioned me to climb up on the fence beside him. He told me the colt would buck again with a new rider, but not so hard.

10 "Don't be afraid," he said. "Just keep yourself pulled up tight against the pommel with the hackamore rope, and keep your eyes on the colt's ears so you'll know which way he's fixing to jump."

11 After that, Hi got on his own horse and guided the colt over against the fence. I eased myself down into my saddle. I noticed that all the fellows had spaced themselves around the corral with their ropes shaken out. When I was set, Hi wheeled his horse and rode away. Ted and Mr. Cooper jumped back, and I was on my own.

12 The colt bogged his head, leaped, and thudded down. From there on I don't know much about it except what they told me afterward. But I do know that he didn't buck the way he did with Hi, or I'd have gone flying. When it was over, Hi came riding in to take



me off, but I didn't want him to. I was so dizzy I could only see a blur, and I couldn't make words come out of my mouth. I think it was because I was still too scared—and too happy because I hadn't fallen off.

13 Hi knew what I wanted, though. He said, "All right, you're going to get to ride him. Open the gate, Len!"

14 Hi's blue never left my side all the way across the alfalfa field, out over a strip of prairie, and back to the corral.

15 The blue colt had bucked harder with me than the fellows had expected him to. I don't know how I stayed on. I guess I was just too scared to fall off. Anyway, Mr. Cooper shook hands with me after Hi lifted me down. He said, "You're going to make a real cowpoke, son. As long as you're with me you can call him your own horse." Then he laughed and said to the other men, "I thought the kid was going to pull that one-inch hackamore rope in two before it was all over."

16 To be truthful, I'd thought so too.

HOW WELL DID YOU READ?

Do you remember what happened?

1. **The colt's first action after Hi got into the saddle was to**
   - **A** spin and circle
   - **B** stand still
   - **C** crash against the poles

2. **The boy knew his turn to ride had come when**
   - **A** his saddle was brought out
   - **B** Mr. Cooper asked if he was afraid
   - **C** Hi took the colt outside the corral

3. **The boy was most afraid that the colt would**
   - **A** trample him
   - **B** run away with him
   - **C** buck him off

4. **The colt's bucking with the boy was**
   - **A** harder than it had been with Hi
   - **B** harder than anyone had expected
   - **C** easier than Hi had hoped

Did you notice the comparisons?

5. **The author compared Hi's voice with**
   - **A** soft music
   - **B** wind in the trees
   - **C** running water

6. **The beginning of the colt's bucking was compared to the**
   - **A** snapping of a whip
   - **B** firing of a gun
   - **C** crack of thunder

Can you draw the right conclusions?

7. **The main purpose of riding the bucking colt was to**
   - **A** impress Mr. Cooper
   - **B** train him as a riding horse
   - **C** get practice for a rodeo

8. **The boy's attitude toward Hi can best be described as**
   - **A** admiring and trusting
   - **B** watchful but obedient
   - **C** respectful and shy

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. moved by careful shifting *(3)*
2. spring that gushes into the air *(3)*
3. tremble *(5)*
4. dull, heavy blow *(8)*
5. round front part of a saddle *(10)*
6. turned *(11)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. chest *(2)*
- **A** box with a lid and lock
- **B** public fund; treasury
- **C** part of the body within the ribs

8. ring *(3)*
- **A** bell sound
- **B** circular enclosure
- **C** piece of jewelry

9. pace *(4)*
- **A** step; stride
- **B** measure of length
- **C** rate of speed

10. set *(11)*
- **A** stiff
- **B** prepared
- **C** stubborn

11. happy *(12)*
- **A** glad
- **B** lucky
- **C** suitable

C. Many words contain **silent letters.** Sometimes the consonants *b, g,* and *k* are silent.

lam~~b~~ ~~g~~nat ~~k~~not

Directions: One word in each line has a silent consonant. Write the word and draw a line through the *b, g,* or *k* that is silent.

12. crumble, crumb, crank

13. reign, train, sparkle

14. anklet, bangle, knit

15. plumber, rumble, think

16. ignore, ignite, gnaw

17. spike, knife, king

18. dimple, drink, dumb

D. high + *er* = higher (more high)
high + *est* = highest (most high)

High is a **base word.** You can build other words on base words by adding endings such as *-er* and *-est.* When *-er* is added to a base word, it often means "more." When *-est* is added, it often means "most."

Directions: Add *-er* or *-est* to the base word to make it fit the meaning. Write the new word.

19. more old

20. most great

21. most light

22. more tall

23. most short

24. more rich

25. more fond

26. more quiet

E. t<u>oi</u>l – t<u>oy</u>
sl<u>ei</u>gh – th<u>ey</u>

The letters *oi* and *oy* have the same sound. Often the letters *ei* and *ey* have the same sound too.

Directions: Two letters are left out of each word. Decide whether *oi, oy, ei,* or *ey* is missing. Then write the word that fits the meaning given.

27. m__st (slightly wet)

28. l__al (faithful)

29. v__ce (something used in speaking)

30. __ght (number after seven)

31. ob__ (follow orders)

32. w__gh (measure heaviness)

33. destr__ (ruin)

4 Why We Walk in Circles

by Nathan A. Court

1 "Pin the Tail on the Donkey" is always fun—when you're watching rather than pinning. It is comical and somewhat surprising to see how the blindfolded performers act. Instead of going straight, they always wander off to one side or the other. The greater the distance to the donkey, the farther they go astray. Have you ever wondered why they are unable to walk straight ahead?

2 It is a well-known fact that a person will move in a circle when he or she cannot use the eyes to control direction. Pitch-black nights, dense fogs, blinding snowstorms, thick forests—all these can keep a traveler from seeing where he or she is going. Then the person is unable to move in any fixed direction, but walks in circles.

3 Animals act the same way. You have probably heard the saying "running around like a chicken with its head cut off." Well, a beheaded chicken actually does run around in circles. Blind birds fly in circles. And a blindfolded dog will swim in circles.

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4 A Norwegian biologist, F. O. Guldberg, decided that this problem of circular movement was worth investigating. He collected many true stories on the subject.

5 One of these stories tells of three travelers who got lost on a snowy night. They left a woodman's hut and set out for their home, which was on the other side of a valley about three miles wide. They started in the proper direction, but without knowing it they soon swerved from their original path. By the time they should have reached home, they were back at the hut instead. Undaunted, they started out once more, with the same result. Four times they set out on a course straight across the valley. Each time they came back to the very same hut, as though under some magic spell. Finally the tired travelers gave up and waited at the hut until daybreak.

6 Many of Professor Guldberg's stories are about people rowing in the open sea during a fog or on a dark and starless night. One group of rowers who tried to cross three miles of water in foggy weather never succeeded in reaching their goal. Without knowing it, they rowed in two large circles. When they finally went ashore they discovered that they were at the spot they had started from.

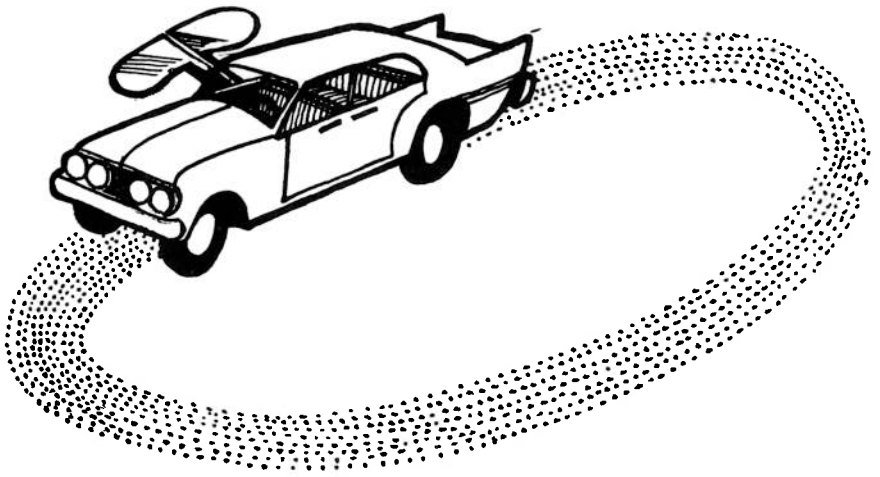
7 After studying many stories such as these, Professor Guldberg wrote an article for a biological magazine. In it he discussed "Circular Motion as the Basic Motion of Animals." A simple example will help you to understand his explanation of why we walk in circles.

8 Have you ever wound up a toy automobile and started it off across the floor? Then you know that it will rarely travel in a straight path. It will travel, instead, in some kind of arc, or curve. If it is to travel in a straight line, the wheels on both sides have to be of exactly equal size. If they are not, the little automobile turns toward the side with the smaller wheels.

9 Circular movement in walking is caused in much the same way. Usually people walking will "watch their step" and "look where they're going." Pedestrians need the senses, especially the eyes, to get to the point they intend to reach. When they cannot use the eyes to guide their steps, they will walk straight *only if the same length of step is taken with each foot.*

10 In most people, however, muscle development is not the same in both legs, so that it is probable that the steps will be uneven. The difference may be so small that no one is aware of it. But small as it is, it can cause circular movement.

11 Let us suppose that a woman's left foot takes a step 10 inches long and that her right



foot takes a step 20 inches long. Now suppose she takes ten steps—five with her left foot and five with her right. Her left foot will travel 50 inches. Her right foot will travel 100 inches. This sounds impossible. One foot cannot remain 50 inches behind the other. What really happens? At each step the woman turns a little bit to the left. Sooner or later she makes a complete circle. The tracks of her feet, however, make *two* circles, one inside the other. Her left foot makes the smaller circle because it is taking smaller steps. Her right foot makes the larger circle because it is taking larger steps. This is why a person may walk in an arc when she sets out in a straight line.

12 The muscles of a person's arms are no more identical than the muscles of the legs. This explains why the rowers who set out to cross the lake at night rowed in a circle. By the same rule, a bird's wings do not develop evenly, and so it will fly in circles when blinded. Thus, dear readers, our circular mystery has a very straight answer.

HOW WELL DID YOU READ?

Did you read carefully?

1. **F. O. Guldberg was a**
   - **A** professor
   - **B** biologist
   - **C** both **A** and **B**

2. **Guldberg began his research by**
   - **A** studying blind birds
   - **B** watching a toy car
   - **C** collecting stories

3. **The three travelers and the group of rowers were similar in that both**
   - **A** started out four times
   - **B** had about three miles to travel
   - **C** traveled in two large circles

Do you remember the main facts?

4. **A toy car will travel in a straight line if**
   - **A** it is placed on a level floor
   - **B** all four wheels are the same size
   - **C** the smaller wheels are in front

5. **Normally, people walk straight by**
   - **A** taking steps of exactly equal length
   - **B** using their eyes to guide their steps
   - **C** both **A** and **B**

Can you draw the right conclusions?

6. **If a woman's right leg is shorter than her left, when blindfolded she will**
   - **A** turn to the right
   - **B** turn to the left
   - **C** walk in a straight line

7. **A right-handed person would tend to swim**
   - **A** to the right
   - **B** to the left
   - **C** in a straight line

8. **A player will be more successful at pinning the tail on the donkey if he**
   - **A** stands back a little farther
   - **B** takes more and shorter steps
   - **C** knows which way he tends to turn

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. funny *(1)*
2. off the right path *(1)*
3. searching into *(4)*
4. turned aside *(5)*
5. not dismayed *(5)*
6. exactly the same *(12)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. fixed *(2)*
- **A** set; decided upon
- **B** repaired
- **C** sturdy; firm

8. blind *(3)*
- **A** sightless
- **B** reckless
- **C** hidden

9. original *(5)*
- **A** not copied
- **B** first
- **C** inventive

10. spell *(5)*
- **A** turn of duty
- **B** enchantment
- **C** period of weather

11. rule *(12)*
- **A** set principle
- **B** straight strip of wood or metal
- **C** government

C. Many words contain **silent letters.** Sometimes the consonants *b, g,* and *k* are silent.

lamb gnat knot

Directions: One word in each line has a silent consonant. Write the word and draw a line through the *b, g,* or *k* that is silent.

12. signal, sign, single

13. gamble, bombing, rank

14. knot, tangled, nimble

15. about, doubt, shout

16. standby, stumble, thumb

17. kernel, kneel, tremble

18. language, foreign, singer

D. hard + *er* = harder (more hard)
hard + *est* = hardest (most hard)

Hard is a **base word.** You can build other words on base words by adding endings such as *-er* and *-est.* When *-er* is added to a base word, it often means "more." When *-est* is added, it often means "most."

Directions: Add *-er* or *-est* to the base word to make it fit the meaning. Write the new word.

19. most small

20. more bright

21. more fair

22. more warm

23. most tight

24. most soon

25. most poor

26. more short

E. sleigh they weather

The letters *ei* and *ey* often sound alike in a word. They both sound like the *ay* in *day.* The letters *ea* have a different sound. They sometimes sound like the first *e* in *elephant.*

Directions: Two of the words in each line have vowel sounds that are alike. Write the word that has the different sound.

27. neigh, prey, breath

28. stead, delay, inveigh

29. pray, convey, feather

30. bread, ending, survey

31. obey, stay, deaf

32. peck, sweat, fey

33. hey, railway, tread

ARCTIC ADVENTURE

by Tony Simon

1 Robert E. Peary had found his life's work. He wanted to be an arctic explorer. Someday, he dreamed, he might be the first man to cross Greenland.

2 But in 1888 this dream was shattered. The great arctic explorer Fridtjof Nansen had crossed southern Greenland. He had covered a three-hundred-mile route much like the one Peary had hoped to take. For days Peary was angry. Then he stopped feeling sorry for himself. There was still much to do in Greenland, he thought. And he would do it.

3 Nansen's journey told nothing of northern Greenland. Suppose it went far to the north? Was it possible to reach the Pole that way? That would be a great scientific feat, and a great event in history.

4 For nearly three years, Peary tried to set up an expedition. He spoke to scientists, wrote letters to important people, and outlined his plans. Gradually people began to notice his efforts. Top United States scientists got behind him. They agreed to provide money for an expedition to Greenland.

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5 Peary immediately set to work rounding up a team of men. On June 6, 1891, they sailed for Greenland on the *Kite*.

6 A month later the ship was moving deep into the arctic off Greenland's west coast. Peary was on deck standing next to the wheel. Suddenly a huge cake of ice crashed into the rudder. The wheel swung loose and hit Peary. It snapped two bones above his right ankle.

7 The leg was set, but Peary was told that he wouldn't be able to walk for months.

8 "We are not going back," he insisted. "People are depending on me. I can't let them down. It will take more than a broken leg to stop me now."

9 Two weeks later the *Kite* sailed into Whale Sound, far up Greenland's western coast. The men started building a winter camp. They put up a wooden house at the foot of the cliffs. To keep busy, Peary directed their work from a chair. For five weeks he could not take a step. But by mid-August he got around with crutches. Every day his leg felt a little stronger. He was able to join the men on hunting trips.

10 In October the days grew shorter. Cold weather set in, and strong winds whipped down from the north. Ice began to form on the sea, and the first snow fell. By November the sun had all but disappeared from the sky. In January the temperature dropped to twenty below. A heavy snowfall half buried the wooden house. Inside, Peary and the men prepared for the trip.

11 They learned as much as they could from the Eskimos who visited the camp. They built sledges and trained dog teams. Peary designed winter clothes and sleeping bags much like those used by the Eskimos. His men cut, stretched, and dried animal skins. Peary then called in Eskimo women to sew the skins. They made bearskin pants, deerskin mittens, and fur coats with fur hoods. They also spent much time preparing a special food called pemmican. It was a kind of arctic hamburger

—chopped walrus, whale fat, spices, and sugar.

12 Peary's plan was to start moving north as soon as daylight returned in February. The worst part of the winter would be over then. Yet it would still be cold enough to keep the ice firm under the sledges.

13 From February to May the men moved supplies by dog team from the base camp to an igloo base. Then, on May 4, 1892, they set out on the great journey.

14 During the next few days, the temperature dropped sharply. One man's heel became frozen, and Peary had to send him back to camp. The rest of the expedition pushed north. Each day the going grew worse. Icy winds tore across the land. Three of the dogs died. Food supplies began to run low. At last Peary had to send two more men back to camp. He and Eivind Astrup went on alone. They began the great "white march" toward unknown northern Greenland.

15 For weeks they pushed across the ice. Each day was like the one before—icy winds, flashing glare, long marches. At last they saw

low coastal mountains in the distance. They were nearing Greenland's northern coast.

16 On July 4 they climbed to the edge of a cliff. Spread out below was a bay opening into the Arctic Ocean. Huge icebergs stuck out from its frozen waters. From this high view, Peary could see that Greenland was not a continent, as people thought. It was an island! On the northern shore of that island, Peary planted the American flag.

17 Peary returned to the United States in the fall of 1892. Newspaper stories of his white march across Greenland thrilled millions of Americans. Scientists of many lands praised him. His maps showed that he had crossed Greenland one thousand miles north of Nansen's route. On a later expedition he succeeded in reaching the North Pole. For his determination and courage, many honors were given him. One was especially fitting. The northernmost land region of the world, in northern Greenland, was named for him: Peary Land.

HOW WELL DID YOU READ?

Did you read carefully?

1. **Crossing southern Greenland was not a challenge to Peary because**
   - **A** the climate is milder there than in the north
   - **B** the southern tip is narrower
   - **C** someone else had already crossed it

2. **Peary's financial backing came from**
   - **A** an international society
   - **B** American scientists
   - **C** the United States government

3. **Peary's broken leg was caused by a**
   - **A** fall on the ice
   - **B** turning ship's wheel
   - **C** broken rudder

Do you remember when?

4. **Winter comes to Greenland in**
   - **A** mid-August
   - **B** December
   - **C** October

5. **Peary decided to start moving north in February because then the**
   - **A** daylight would have returned
   - **B** ice would be firm enough to travel on
   - **C** both **A** and **B**

Can you put the facts together?

6. **Peary and his men camped on Greenland's coast for nearly**
   - **A** five months
   - **B** one year
   - **C** two years

Do you remember the facts?

7. **The "white march" refers to**
   - **A** Peary's expedition to Greenland
   - **B** the long winter in the cabin
   - **C** Peary and Astrup's trip

8. **On the trip described in this story, Peary**
   - **A** reached the North Pole
   - **B** crossed the Arctic Ocean
   - **C** discovered that Greenland was an island

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. destroyed *(2)*
2. act of great daring or skill *(3)*
3. equipment and people for a journey *(4)*
4. sleds carrying loads on snow *(12)*
5. land surrounded by water *(16)*
6. firmness of purpose *(17)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. covered *(2)*
- **A** concealed
- **B** traveled over
- **C** reported

8. set *(7)*
- **A** put in normal position
- **B** hardened
- **C** covered with gems

9. busy *(9)*
- **A** meddlesome
- **B** full of detail
- **C** active

10. trips *(9)*
- **A** light, quick steps
- **B** short journeys
- **C** mistakes

11. bay *(16)*
- **A** excited barking
- **B** wing of a building
- **C** indentation in shoreline

C. tăl′ ent
rū′ in

When an accented syllable ends in a vowel, the vowel sound is usually long. When an accented syllable ends in a consonant, the vowel sound is usually short.

Directions: Write each word as it is divided. Mark the vowel in the accented syllable long (¯) or short (˘).

12. in side′
13. par tic′ u lar
14. pal′ let
15. pre tend′
16. re bel′ lion
17. ob′ ject
18. gra′ vy

D. beauty + *full* = beautiful (full of beauty)
weight + *less* = weightless (without weight)

A **suffix** is a syllable that is added to a word to change its meaning. The suffix *-ful* means "full of." The suffix *-less* means "without."

Directions: Use the suffix *-ful* or *-less* to make a word that fits each meaning. (Notice that you leave off one *l* when you add *-ful* and that *y* changes to *i* when a suffix is added.)

19. full of mercy
20. without mercy
21. full of remorse
22. without a penny
23. without a thought
24. full of thought
25. without blame
26. without heed

E. Homonyms are words that sound alike but have different meanings.

pare = to take the skin off
pair = two of the same
pear = a kind of fruit

Directions: There are two homonyms in each sentence. One of them makes the sentence correct. Write the correct homonym.

27. The goose is a bad-tempered (fowl, foul).
28. We left (four, for) New York at three o'clock.
29. She (dyed, died) the curtains red.
30. A female sheep is a (you, ewe).
31. What is the (fair, fare) to Toledo one way?
32. He was a (colonel, kernel) in the army.
33. Early in the morning there is (due, dew) on the grass.

by Alan Moorehead

A VISIT TO NAIROBI NATIONAL PARK

Wild Animals Face to Face

1 There is no place in all Africa—or in the world—quite like Nairobi National Park. It covers only forty-four square miles, but it is a whole miniature world of unconfined wildlife.

2 The park lies near the outskirts of the city of Nairobi. In fact, it is said that hyenas come scavenging through the city streets at night. A taxi from Nairobi to the gates of the park takes only a quarter of an hour.

3 The hour before dusk is the best time to arrive. The sunset colors then can be quite wonderful. Most of the park is rolling grassland dotted with flat-topped acacia trees. There is little to block the view. Everything that moves is instantly seen.

4 On our first visit to the park, we had been inside the gate less than five minutes when we saw a lioness. She stood up beside us on the road. Then she strolled across to a rock that gave her a wide view. She squatted on her haunches there, a brown silhouette in the evening light.

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5 A lion in its wild state is much like a household cat. It has the same soft tread, the same twitching tail, and the same terrible indifference. This lioness was a perfect specimen. There she sat motionless on the rock ten yards above us. All around her grazed herds of gazelle and wildebeest, of zebra and impala. A line of ostriches passed by on the skyline. On the slopes below, baboons of various sizes were scratching themselves. But the lioness was not hunting. She simply sat and watched. Perhaps she was making observations that would be useful on another, hungrier day.

6 In the distance we could see half a dozen cars filled with other visitors. They had gathered in a circle at the bottom of a stream. We bumped over the rocks toward them. There in the long grass about twelve feet away two other lionesses and eight cubs were playing. This is the kind of scene that has made Nairobi Park famous. It is hard to believe that one can get so close.

7 Both mothers were lying on their backs with their paws in the air. The cubs were pretending to fight them. The younger ones were not very clever at this game. They came stalking through the long grass with great intentness. Then, just as they were about to pounce, something would catch their attention. It might be another cub stealing up behind, or just a butterfly passing by on the breeze. They would prance on their hind legs, making wild swipes in the air or tumbling over each other. Their heads seemed at times just a bit too heavy for them to handle. Often their weak legs got hopelessly out of control.

8 The older cubs, however, were much more professional. It would be a year or more before their mothers had taught them how to go out and kill for themselves. But already that quick pounce to the throat looked very real. Once or twice, the game got too rough. Then the mother bared her teeth a little. With one lazy blow she sent the cub tumbling head over heels into the grass.

9 We watched for an hour, until the daylight began to fade. Then one of the lionesses got up and began to walk slowly along the rocky floor of the valley. There can be nothing quite so noble as the sight of a lioness going off like this in the dusk to hunt. She walks along with her head down, completely sure of herself. She knows that there is no other beast—not even the elephant or buffalo—that would dare to attack her. She knows that the whole forest waits in fear as she passes by.

10 You long to see her make a kill. At the same time, you cannot help pitying the smaller animals she hunts. The baby zebras, for example, are so new and helpless and cunning. They look like toys—like little rocking horses with stripes.

11 On this night we did not see a kill. Darkness closed in, and the lioness vanished into the rocks. No doubt before morning she would kill an animal large enough for both lion families to eat.

12 We went back toward the park gate. On the way we saw a flock of storks. It had just arrived, and would soon continue its northward journey to Europe. The birds were restless. They kept landing and taking off again. But at last they chose a group of trees and settled down there for the night.

13 It is the nearness of these things at Nairobi Park that is so astonishing. It is strange to think that only a few miles from the city, a lioness in the park is launching herself for the kill. You feel as though you had been to a drive-in movie. Now that the show is over, it seems that the animals should disappear as the actors do. You feel that they ought to vanish from the stage until it is time for them to perform again tomorrow.

HOW WELL DID YOU READ?

How exact was your reading?

1. **Nairobi National Park is located**
   - **A** far from all civilization
   - **B** in the center of a city
   - **C** near the outskirts of a city

2. **The park can best be described as**
   - **A** rough and mountainous
   - **B** grassy and open
   - **C** flat and treeless

3. **The author traveled about the park by**
   - **A** foot
   - **B** horseback
   - **C** motor vehicle

4. **On the visit described here, the author was inside the park from**
   - **A** sunup until sunset
   - **B** dusk until dark
   - **C** noon until evening

What likenesses did the author see?

5. **The author felt that a wild lion was like a household cat in its**
   - **A** playfulness
   - **B** indifference
   - **C** laziness

6. **The author thought young zebras looked like**
   - **A** deer
   - **B** toys
   - **C** statues

What do you know about the author?

7. **The author thought that the most surprising thing about the park was**
   - **A** the quantity of its wild game
   - **B** the beauty of its scenery
   - **C** its nearness to a large city

8. **Had the author seen a lion make a kill, he would have been**
   - **A** astonished
   - **B** horrified
   - **C** fascinated

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. collecting discarded matter *(2)*
2. dark outline, usually in profile *(4)*
3. step *(5)*
4. without moving *(5)*
5. things noted *(5)*
6. starting off *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. covers *(1)*
- **A** extends over
- **B** hides
- **C** protects

8. view *(3)*
- **A** opinion
- **B** sight
- **C** aim; goal

9. state *(5)*
- **A** condition
- **B** territory
- **C** dignity

10. rough *(8)*
- **A** not even
- **B** not gentle
- **C** not exact

11. noble *(9)*
- **A** magnificent
- **B** famous
- **C** moral; idealistic

C. stăm′ mer
pro dūce′

When an accented syllable ends in a vowel, the vowel sound is usually long. When an accented syllable ends in a consonant, the vowel sound is usually short.

Directions: Write each word as it is divided. Mark the vowel in the accented syllable long (¯) or short (˘).

12. hate′ ful

13. bid′ den

14. cra vat′

15. re duce′

16. la′ zy

17. per haps′

18. na′ tive

D. truth + *full* = truthful (full of truth)
dream + *less* = dreamless (without a dream)

A **suffix** is a syllable that is added to a word to change its meaning. The suffix *-ful* means "full of." The suffix *-less* means "without."

Directions: Use the suffix *-ful* or *-less* to make a word that fits each meaning. (Notice that you leave off one *l* when you add *-ful.*)

19. without a job

20. full of need

21. without meaning

22. without cheer

23. full of cheer

24. without end

25. without a friend

26. full of rest

E. Homonyms are words that sound alike but have different meanings.

pare = to take the skin off
pair = two of the same
pear = a kind of fruit

Directions: There are two homonyms in each sentence. One of them makes the sentence correct. Write the correct homonym.

27. How do you (sew, so) a hem?

28. (Some, sum) fruits are bitter when they are not ripe.

29. The (son, sun) is shining brightly today.

30. I must (bye, buy) a new notebook.

31. The prisoner was led to his (sell, cell).

32. These are the tracks of a (deer, dear).

33. A week lasts for seven (daze, days).

7

Girl Wonder of Wall Street

by Kathleen Bowman

AP/Wide World Photos

Sylvia Porter early in her career

UPI/Bettmann Newsphotos

. . . and today

1 One July day in 1932, a young, dark-haired girl sat drinking coffee and reading the want ads in a New York City snack shop. On a chain around her neck hung a gold Phi Beta Kappa key. She had just graduated with high honors in economics from Hunter College. But it was the worst part of the Depression and jobs were hard to find.

2 Suddenly the girl's eye caught a small notice in the paper. It said a new investment firm, Glass & Krey, was opening that very day. And it was just down the street from the snack shop.

3 The girl picked up her things. She ran to the Glass & Krey office. There she found the firm's president, Arthur Glass. He was just about to doze off at his desk.

Adapted and reprinted from New Women in Social Science *by Kathleen Bowman.*
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4 Glass peered at her sleepily. Then he pointed to her Phi Beta Kappa key. "I've always wanted to hire someone with one of those," he said. "What can you do?" Within a matter of minutes, the girl had been hired as "assistant to the president." Her salary was $20 per week.

5 For young Sylvia Porter, the world of finance was filled with dramatic moments. One night in 1933, she sat in Central Park with Glass. They were debating the likelihood of the United States going off the gold standard. This meant that people would no longer be able to exchange dollars for gold coins. At midnight, she got a phone call from Glass. He told her to come to the office in the morning with enough clothes packed to last for a week.

6 As Sylvia set off for work in the morning, she was mystified. What could it all mean? Later that day Glass put her on a boat to Bermuda. Her baggage included ten heavy suitcases containing $175,000 in gold coins. Glass told her, "Sit on them. Don't put them in a bank."

7 When the boat docked, a telegram from Glass was waiting for Sylvia. It said, "The expected has happened. Wait for instructions." She had the heavy cases lugged to a hotel. Then she locked her door and waited nervously.

8 A few days later another message came from Glass. The United States had gone off the gold standard. Sylvia was to follow his instructions.

9 She sold the gold coins for British pounds and bought British bonds with the pounds. Then she took the bonds back to the United States and converted them into dollars. What was the result? A profit for her company of $10 for each ounce of gold she had lugged to Bermuda.

10 However, the person on her way to becoming the "girl wonder of Wall Street" had not always planned on a financial career. As a child she had dreamed of becoming a writer.

11 Sylvia's parents, Jewish immigrants from Russia, encouraged her to write. "We were a family that didn't think it was unfeminine for a girl to think," recalls Sylvia's brother John. "If anything, we thought that intelligence added to womanliness."

12 When Sylvia entered Hunter College in 1928, she still wanted to be a writer. So she majored in English. But a year later her education took a dramatic turn. 1929 was the year of the stock market crash. Millions of dollars suddenly disappeared. Those millions included $30,000 that Sylvia's mother had invested from her profits as a hat designer.

13 Sylvia's family had once been comfortably middle class. But now they had to struggle to survive. "It took awhile for the pinch to really hurt," Sylvia recalls. "But when the roof fell in, I was appalled—and fascinated. How could something like that happen? How could so much money just disappear?"

14 Sylvia was determined to find out the answers. She changed her major from English to economics. She studied very hard. Three years later she graduated with a degree and high honors.

15 Despite her new field and her job with Glass & Krey, Sylvia still wanted to write. She wanted to do a financial column for a major newspaper.

16 In 1935, she applied to the Associated Press for a job. She was turned down. She was told that the AP had "never had a woman in its financial department and never would."

17 The response at the *New York Sun* wasn't much different. "Not a woman," said the financial editor. "Oh, no, never."

18 Sylvia refused to give up, however. And at last she got a job with the *New York Post.*

19 But even the *Post* had reservations about a woman financial writer. So that no one would know she was a woman, the *Post* ran her column under the by-line "S. F. Porter."

20 It wasn't until July 15, 1942, that the by-line was changed to "Sylvia F. Porter." "On that day," reflects Sylvia, "I became a woman."

21 Millions of readers devour Sylvia Porter's financial advice. Her column appears in newspapers throughout the United States. She also has written books, magazine articles, and newsletters.

22 Sylvia's expertise in financial writing has shattered the old myth that "a woman can't even balance her own checkbook." Since the age of 21, the "girl wonder of Wall Street" has moved among the male financial wizards as a respected equal.

HOW WELL DID YOU READ?

Did you understand why?

1. **Sylvia Porter got her job with Glass & Krey mainly because she had**
   - **A** a Phi Beta Kappa key
   - **B** a degree from Hunter College
   - **C** experience in the field of finance

2. **The *New York Post* ran Sylvia's column under the by-line "S. F. Porter" because**
   - **A** there was another columnist with the name Sylvia Porter
   - **B** the paper didn't want anyone to know Sylvia was a woman
   - **C** newspapers always used initials in a columnist's by-line

Did you read carefully?

3. **When the United States went off the gold standard, it meant that people could no longer**
   - **A** have their teeth filled with gold
   - **B** mine gold within the United States
   - **C** exchange dollars for gold coins

4. **As a child, Sylvia dreamed of becoming**
   - **A** a writer
   - **B** a financial analyst
   - **C** an English teacher

Why did the character act as she did?

5. **Sylvia changed her major from English to economics because she**
   - **A** didn't like the English courses she was taking
   - **B** wanted to get a job with an investment firm
   - **C** wanted to learn what caused the stock market crash

6. **Sylvia took the job with the *New York Post* probably because it**
   - **A** allowed her to write as well as deal with financial matters
   - **B** enabled her to leave a job she disliked
   - **C** paid much more than her job with Glass & Krey

Can you draw the right conclusions?

7. **Sylvia's family probably believed that women**
   - **A** deserve an education but shouldn't work in business
   - **B** should have all the same opportunities as men
   - **C** belong at home taking care of the family

8. **Sylvia can best be described as being**
   - **A** intelligent but aimless
   - **B** intelligent and goal oriented
   - **C** intelligent and shy

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. arguing *(5)*
2. bewildered; puzzled *(6)*
3. changed; exchanged *(9)*
4. specialized; studied primarily *(12)*
5. thinks; considers; remembers *(20)*
6. skill and special knowledge *(22)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. dock *(7)*
- **A** made shorter
- **B** gave less pay
- **C** pulled up to a pier

8. crash *(12)*
- **A** loud noise
- **B** serious accident
- **C** sudden downturn

9. column *(15)*
- **A** long line of soldiers
- **B** regularly-appearing newspaper article
- **C** large post that supports a building

10. reservations *(19)*
- **A** areas set aside for Indian tribes
- **B** arrangements to have something held for oneself
- **C** feelings of doubt or uncertainty

11. devour *(21)*
- **A** enjoy keenly
- **B** eat greedily
- **C** prey upon

C. Words are arranged in **alphabetical order** in the dictionary.

all
big
camel

Directions: Read the words in each line. Write the word that would come first if they were put in alphabetical order.

12. divide, never, kitchen, cry

13. marble, point, letter, rushing

14. jealous, idiot, hand, lot

15. favorite, highbrow, gem, juice

16. slant, whale, quickly, rose

17. bear, dive, ending, cork

18. wild, yellow, various, painted

D. When words begin with the same letter, you need to look at the second letter to see whether they are in **alphabetical order.**

ai d
am ber
ap ple

Directions: Read the words in each line. They are not in alphabetical order. Write the word that is out of order.

19. south, scotch, serious, stamp

20. part, provide, pear, pink

21. hire, horse, hungry, hear

22. camp, cub, cinder, country

23. glory, gate, ghost, grumble

24. twin, touch, turn, tying

25. moat, meat, mighty, myrtle

26. lass, lid, love, leek

E. When the first two letters of words are alike, you need to look at the third letter to put the words in **alphabetical order.**

sna ke
sne ak
sno w

Directions: Read the words in each line. Write the word that should come last in alphabetical order.

27. quick, quote, quake

28. pray, pretty, profit

29. sheet, shoddy, shark

30. about, abbot, able

31. chide, cheer, chair

32. eager, eat, easy

33. debt, deter, decorate

THE BIG WIND

by Ralph Moody

1 It was blowing when we woke up, and the tumbleweeds were rolling across the prairie like big brown bowling balls pitched by some giant in the mountains. By schooltime the wind was too strong for Grace and me to stand against. By noon it had shaken our house until some of the windows had broken out. The whole house was vibrating like a beaten drum, and every few minutes a joint among the rafters would crack with a report as sharp as a rifle shot.

2 Father's face was gray and Mother's was milk-white. Neither of them spoke; their mouths were clamped tight. The muscles were popping out and in on the sides of Father's jaws.

3 Father went out and untied the horses. They drifted away to the east, the wind whipping their tails up under their bellies. Next he brought poles and propped them against the lee side of the house, to brace it against the wind. Mother huddled us into a corner of the bed-

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room, away from the windows. She crouched over us like a hen protecting her chicks. There came a tearing screech from the roof as the wind ripped away a section of the shingles, and sheets of plaster fell from the ceiling.

4 Father crawled in through a blown-out window with a coil of rope in his hand and knotted the rope around our chests and shoulders. We were strung on it the way Mother used to string popcorn balls at Christmas. Philip was on one end and Muriel was on the other. Only little Hal was not tied on. Father fastened Philip's end of the rope around Mother's waist. He tied Muriel's end around his own.

5 Then he motioned to us to follow, tied Hal on his back like a papoose, and crawled out the window. Mother passed each of us out to him. Father took us and told us to fall to the ground and lie still. After he had lifted Mother down, he crouched and told us to crawl on our stomachs like horned toads. He said that dust would get in our eyes, but we must keep them open so that we would not blunder into cactus beds.

6 Father began to crawl, and we crawled after him. When we had wriggled along for a hundred yards or so, Father stopped to let us rest, and I looked back toward Philip and Mother. Philip must have gotten cactus spines in his hand, because he held it out toward Mother and tried to sit up. The wind caught him and rolled him like a tumbleweed as far as the rope would let him go. As he went, Mother sprang to her hands and knees. She was barely up when she sprawled forward on her face as though some giant had put his foot on her from behind and shoved. In that same backward glance, I saw the roof of our new barn fly away like a sheet of newspaper.

7 We started on. The next time we stopped to rest, I looked back again. There was blood on Mother's face. Our barn was gone completely.

8 A few minutes after we had begun crawling again, something like the shadow of a great bird flashed past me. A second later the body of our farm wagon struck a few feet beyond Father. It bounced crazily like a football and flew away in splinters.

9 My eyes were running from the dirt in them, my nose burned as though the dust in it were pepper, and I was coughing from breathing through my mouth.

10 We crawled across the wagon road, and on, and on. The wind ripped up curled, dry leaves of buffalo grass and raked them across our faces. It was like being struck with a jigsaw blade. It seemed hours longer before we crawled into the head of a gulch leading down to Bear Creek. Now we were under the level of the prairie, and it was safe to raise up and crawl on our hands and knees.

11 Father led us along to where there was a kind of cave in the west bank of the gulch. There was hardly any wind there. I was so tired I could barely move, and I was shaking all over. I wasn't frightened any longer, and

nothing was hurting me, but I started to cry. I didn't know what I was crying for, but I couldn't make myself stop. Everybody but Father and Mother was crying.

12 The wind went down with the sun. We crawled from our shelter under the bank, cold, stiff, and ragged. Our faces were smeared with blood, cut by the sharp grass that had been whipped against us by the wind, and our hands, arms, and legs were burning with cactus spines. It seemed to me that we had crawled miles on our stomachs, but when we came out at the head of the gulch, our house stood little more than half a mile away.

13 The house leaned tiredly against the prop poles. From the wagon road it looked like a deserted ruin. It and the bunkhouse stood alone; barn, wagon, and everything else were gone.

HOW WELL DID YOU READ?

Can you draw the right conclusions?

1. **Father probably released the horses because he thought they would be**
   - **A** needed later in the day
   - **B** safer outside the barn
   - **C** good guides to follow

2. **Father wanted the children to keep close to the ground so that**
   - **A** the dust would not bother them
   - **B** they would not see the destruction
   - **C** they would not be blown over

Did you notice the comparisons?

3. **The narrator compared his mother to a**
   - **A** cat carrying a kitten
   - **B** bear hiding her cubs
   - **C** hen protecting her chicks

4. **The narrator thought the family tied along the rope looked like**
   - **A** bowling balls
   - **B** giant birds
   - **C** popcorn balls

How carefully did you read?

5. **The family found shelter in a**
   - **A** cellar
   - **B** cave
   - **C** barn

Did you notice the order of events?

6. **Of the following events, the first to happen was the**
   - **A** barn blowing away
   - **B** wagon flying overhead
   - **C** family reaching the gulch

7. **The children did not cry until they**
   - **A** had to leave the house
   - **B** got out of the wind
   - **C** saw that the farm was destroyed

8. **The wind began to die down**
   - **A** at noon
   - **B** about sunset
   - **C** late that night

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. side away from the wind *(3)*
2. stumble *(5)*
3. thin, sharp pieces of wood *(8)*
4. scraped *(10)*
5. deep, narrow ravine *(10)*
6. destroyed or decayed thing *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. beaten *(1)*
- **A** mixed
- **B** defeated
- **C** repeatedly struck

8. report *(1)*
- **A** explosive noise
- **B** official account of events
- **C** rumor

9. backward *(6)*
- **A** turned toward the rear
- **B** bashful; shy
- **C** slow; behind time

10. ragged *(12)*
- **A** uneven; rough
- **B** imperfect; not finished
- **C** dressed in torn clothes

11. sharp *(12)*
- **A** not gradual; abrupt
- **B** thin-edged; keen
- **C** distinct; clear

C. chicken Chicago school

The letters *ch* make three different sounds: *ch* as in *chicken, sh* as in *Chicago,* and *k* as in *school.*

Directions: Read the words in each line. If all three words have the *ch* sound of *chicken,* write *ch*. If a word in the line does not have that sound, write the word.

12. watch, cheek, exchange

13. inches, school, achieve

14. pitcher, batch, machine

15. chuckle, check, ranch

16. echo, luncheon, couch

17. choose, charge, notch

18. chimney, christen, chin

D. busy + *er* = busier (more busy)
busy + *est* = busiest (most busy)

Busy is a **base word.** You can build other words on base words by adding endings such as *-er* and *-est.* When *-er* is added to a base word, it often means "more." When *-est* is added, it often means "most."

Directions: Add *-er* or *-est* to the base word to make it fit the meaning. Write the new word. (Notice that *y* changes to *i* when a suffix is added.)

19. more white

20. most ugly

21. most hungry

22. more dark

23. more thirsty

24. most cold

25. more fancy

26. most worthy

E. The letters *oo* may have two different sounds. In *book* they have a short sound. In *boot* they have a long sound.

$\breve{o}o$k $\bar{o}o$t

Directions: Write each word. Mark the vowels long or short.

27. booming

28. food

29. wood

30. mood

31. broom

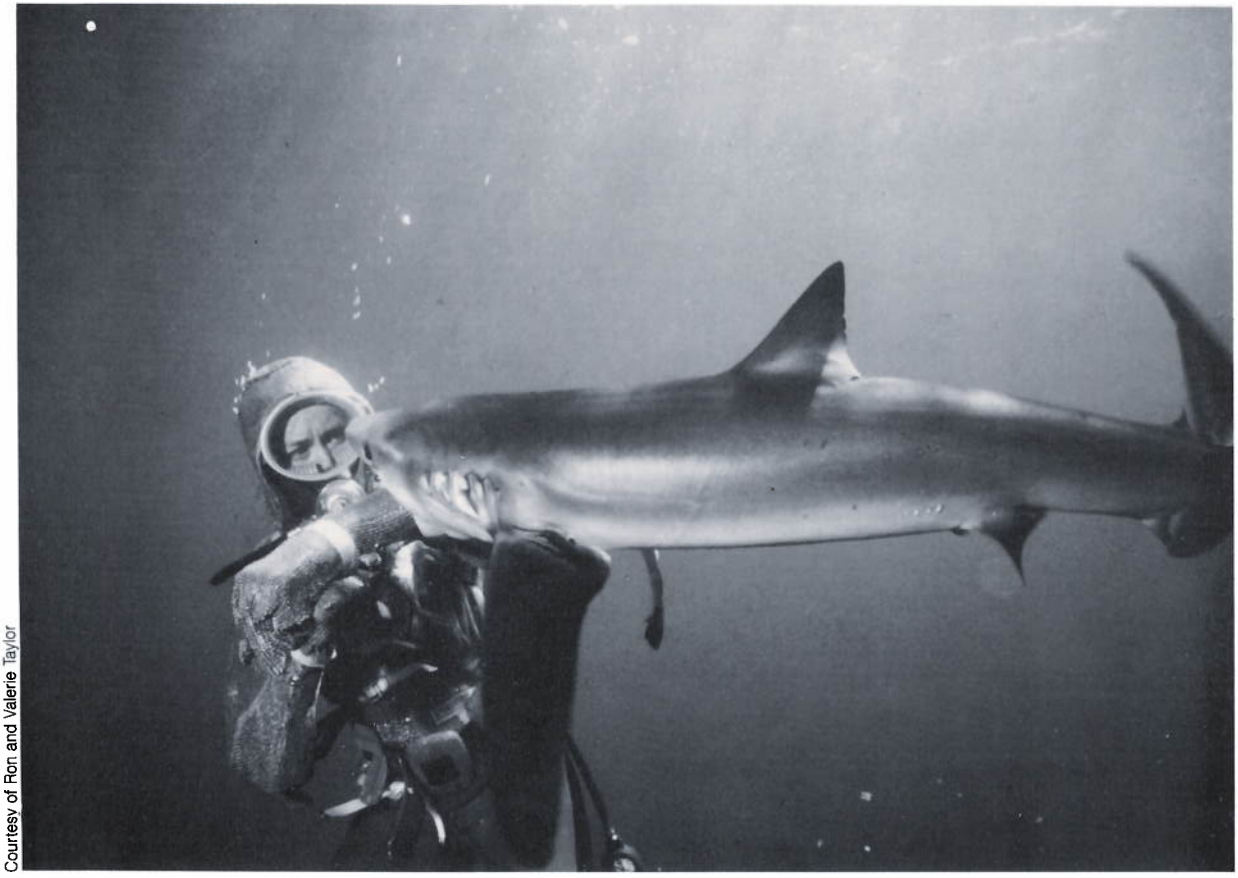
32. brook

33. goodness

9

She Swims with Sharks

by Lisa Yount



Courtesy of Ron and Valerie Taylor

Valerie Taylor testing the durability of a diving suit

1 The water around Valerie Taylor swirled with sharks. They weren't very big as sharks go. Still, their bodies were longer than she was tall.

2 The sharks had been drawn to Valerie by the bleeding fish in her hand. Now one of the sharks, bolder than the rest, lunged at the bait. Valerie snatched the fish away. Instead of the bait, she thrust her arm into the shark's open mouth.

3 A watcher might well have decided that this slender blond woman was completely crazy, but the watcher would have been wrong. Valerie Taylor knew exactly what she was doing—at least, she hoped she did.

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4 Her arm was not bare. Like the rest of her body, it was protected by a special suit. The suit was constructed of thousands of tiny steel rings woven together. It was something like the chain mail that had protected the knights of the Middle Ages in battle.

5 Was the suit durable enough to protect a diver against the fearsome teeth of sharks? Nobody knew. No diver had ever tested it.

6 The shark's jaws locked onto Valerie's arm. They jerked it from side to side. Yet no cloud of blood began to appear. Valerie's "armor" was holding up.

7 Later Valerie tested the suit against a different kind of shark. This species of shark lives in the seas near Valerie's home country of Australia.

8 Giving the sharks a second chance would have seemed to most people like tempting fate. Maybe it was, for Valerie's fortune was not so good this time. One of the frenzied sharks struck her in the face, disturbing her mask. It tore her air hose from her mouth. Immediately her mask filled with water. Now she couldn't see, and she couldn't breathe.

9 Struggling weakly, she swam toward the surface, but now the suit that had protected her life became a threat to it. The heaviness of the steel began to drag her down.

10 Fortunately, Valerie wasn't alone. In the water with her was her husband, Ron. Like Valerie, Ron was a diver and an underwater photographer. He had been attempting to film Valerie and the sharks. Now he swam to Valerie and jammed her mouthpiece back into her mouth. That let her breathe again.

11 Bruised and exhausted, Valerie sank to the bottom. She had to rest there a moment before she could swim upward and climb onto the Taylors' boat.

12 Only when Valerie looked into a mirror did she fully realize how close to death she had come. There on her chin were four punctures. Some of the shark's teeth had slipped through the gap where the hood of her suit met the rest of her armor. The tip of one tooth, in fact, was buried in her face. It is there still.

13 That hasn't prevented Valerie from swimming with sharks, though. Valerie Taylor likes sharks. She and Ron have filmed sharks all over the world. Sometimes the Taylors wear the shark armor. At other times, they lower themselves into the water in metal cages. Valerie has even shared the water with great white sharks. This fearsome kind of shark features in the horror film *Jaws*.

14 In fact, Valerie likes to study all the creatures of the sea. She became fascinated with undersea life during her first dive. She was just nineteen at the time. She was swimming near the Great Barrier Reef, a huge coral reef that stretches for over 1200 miles off the northeast coast of Australia. The brilliantly colored plants and animals of the reef seemed like creatures from another planet. Valerie knew that she wanted to visit that strange world again and again.

15 Today, Valerie Taylor shows other people the beauty of the sea. She teaches them how important it is to take care of the oceans. Pollution, undersea mining and drilling, and an excess of fishing can greatly harm places like the Great Barrier Reef.

16 The Great Barrier Reef is one of Valerie's favorite places in the world. She and Ron have worked hard to protect it. Thanks partly to their work, several areas of the reef have been fashioned into marine parks.

17 Rules in the parks let people enjoy the reef without harming it. Visitors can examine reef life as they ride in glass-bottomed boats. In some places they can walk across the reef at low tide. They can dive among the reef creatures, as Valerie does. They can float on the surface, observing plants and animals below them through face masks.

18 Valerie remembers one visitor, a teacher from Sydney. The teacher donned the snorkel and face mask. She didn't want to wear a bathing suit, however. She simply jumped into the sea with her street clothes on, and

floated in the shallow water, pushing herself along with a sturdy walking stick!

19 Day after day the teacher returned. On the last day of her vacation she said to Valerie, "If you hadn't encouraged me, I might have died without realizing there is another whole world under the sea. It frightens me to think how close I came to missing it."

20 Valerie Taylor loves the sea as much as that woman did. She wishes everyone could become familiar with this fascinating world "down under."

HOW WELL DID YOU READ?

Did you notice the details?

1. **Valerie Taylor's shark armor was made of**
   - **A** iron
   - **B** steel
   - **C** plastic

2. **The shark was able to injure Valerie because its teeth**
   - **A** were sharper than those of other shark species
   - **B** could easily pierce the armor
   - **C** slipped through a gap in the armor

3. **The Great Barrier Reef is formed from**
   - **A** coral
   - **B** sunken ships
   - **C** undersea mountains

What was the reason?

4. **The armor became a danger to Valerie because**
   - **A** its weight dragged her down
   - **B** it began to choke her
   - **C** its shininess attracted more sharks

5. **Making the reef into a marine park protects it because**
   - **A** people must obey certain rules in the park
   - **B** people are not allowed in the park
   - **C** guards patrol the park all the time

Can you draw the right conclusions?

6. **According to the story, which of the following does not present a danger to the Great Barrier Reef?**
   - **A** Commercial fishing
   - **B** Undersea oil drilling
   - **C** Glass-bottomed boats

7. **Valerie's shark armor seems to be**
   - **A** very unsafe
   - **B** moderately safe
   - **C** extremely safe

8. **The teacher from Sydney can best be described as**
   - **A** quite fearful
   - **B** very foolhardy
   - **C** somewhat adventuresome

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. very angry; upset *(8)*
2. danger *(9)*
3. one who takes pictures with a camera *(10)*
4. holes made by a sharp object; wounds *(12)*
5. very interested *(14)*
6. put on; wore *(18)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. drawn *(2)*
- **A** hauled; dragged
- **B** attracted
- **C** pulled out

8. bare *(4)*
- **A** unclothed
- **B** worthless
- **C** unfurnished

9. rings *(4)*
- **A** gangs
- **B** circular bands
- **C** boxing enclosures

10. tore *(8)*
- **A** pulled apart
- **B** wounded
- **C** removed

11. realizing *(19)*
- **A** gaining
- **B** producing
- **C** understanding

C. br cr dr fr gr pr tr

Often two consonants come together in a word to make one sound. This is called a **consonant blend.**

(br) awny
a (cr) oss

Directions: A consonant blend has been left out of a word in each sentence. Decide which of these blends is missing and write the whole word.

12. The Chicago-Milwaukee train is an ex__ess.

13. Dogs are usually __iendly.

14. Turpentine cleans paint __ushes.

15. I never tell lies; I speak the __uth.

16. Tom is taking __iving lessons.

17. Don't eat cookies in bed; they make too many __umbs.

18. Crops are __owing well this season.

D. sn sm sw sp st

These letters often come together in words as **consonant blends.**

Directions: A consonant blend has been left out of each word. Decide which of these blends is missing and write the whole word.

19. __irit

20. __eater

21. __oky

22. __em

23. mis__elled

24. __eeze

25. mi__ake

26. wa__

E. *re* + pay = repay (pay back)
un + happy = unhappy (not happy)

The **prefixes** *re-* and *un-* can be added to many base words. *Re-* means "back" or "again," and *un-* means "not."

Directions: Add *re-* or *un-* to each of these words to make it fit the meaning given. Write the new word.

27. bound (bounce back)

28. likely (not probable)

29. necessary (not needed)

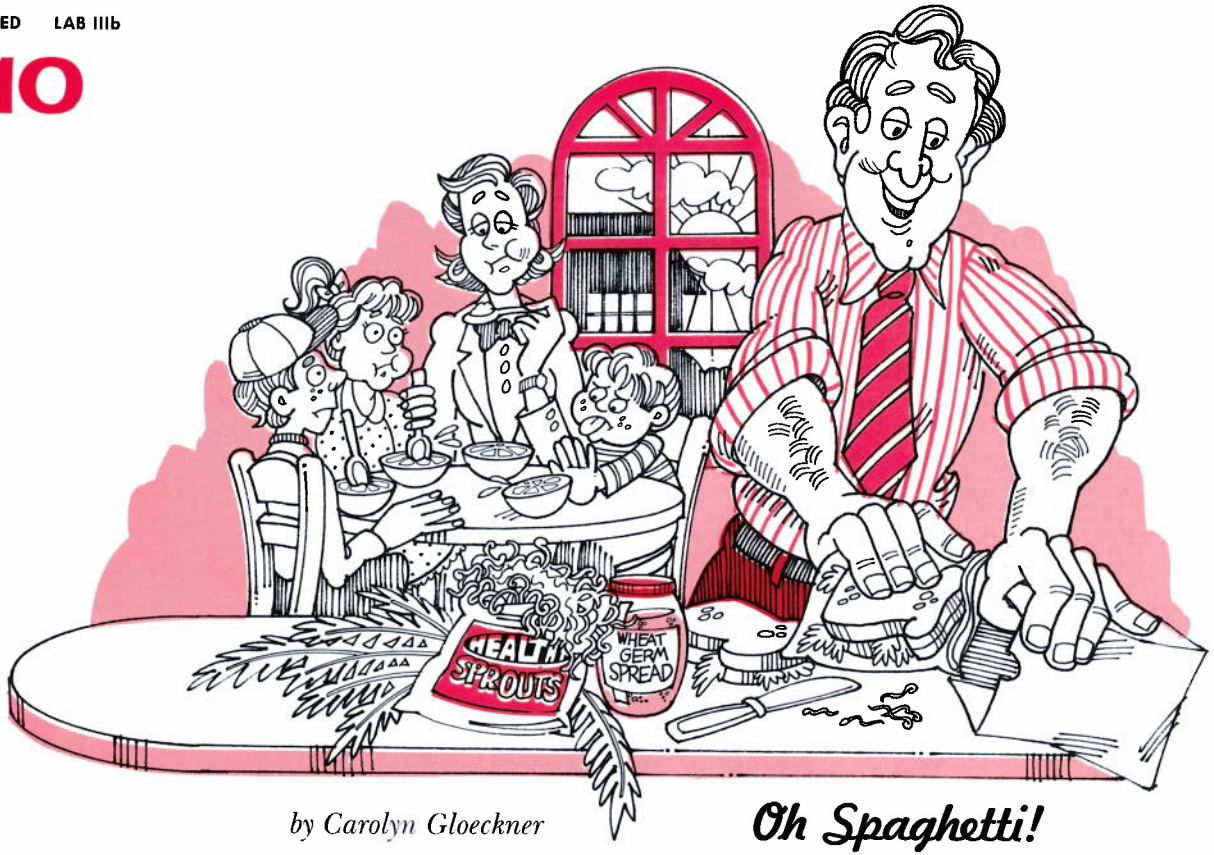
30. fund (pay back)

31. earned (not deserved)

32. pair (put back into good condition)

33. familiar (not known)

10



by Carolyn Gloeckner

Oh Spaghetti!

1 Meals at my house were always luscious, but my favorite was spaghetti. Nobody could cook spaghetti like Mom. The sauce was always thick and meaty, a thin slick of oil floating on top. Poured over pasta cooked with a little butter, sprinkled with grated Parmesan cheese, it was more of an event than a meal.

2 Wednesday was always spaghetti night at our house—until Uncle Louie had his heart attack. When Dad came home from visiting Louie in the hospital, Dad was a different man.

3 "It's his arteries, Gloria," he told Mom. "They're all clogged up. Louie's doctor showed me pictures of clogged-up arteries. You know what causes clogged-up arteries? Animal fats, eggs, meat, milk, cheese! Gloria, we've just got to change the way we eat! We've got to cut out all the animal fats!"

4 Dad had stopped off at a bookstand and picked up a vegetarian cookbook on his way home from the hospital.

5 "There!" he said, presenting it to Mom with a flourish. "This is going to save our lives! And you, Juliet, . . ."

6 "Me?" I squeaked, jumping a little.

7 "You, my daughter, are going to live to be at least one hundred. It

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may be too late for your mother and me, but you—your arteries will be clear until the day you die!"

8 He went to the refrigerator, and, before we knew what was happening, began flinging things out. Down the kitchen drain went the eggs and butter. Into the garbage can went the meat, cheese, and chicken.

9 My baby brother, Timmy, watched solemnly. His vocabulary was limited, but he knew what was up.

10 "Bye-bye food," Timmy said.

11 "That's such a waste!" Mom objected. "Shouldn't we at least give it away to our friends?"

12 "Would you give your friends *poison*?" Dad replied reproachfully.

13 Dad always threw himself into things completely. But this time he was throwing all of us in with him.

14 Breakfasts were terrible. You could have anything you wanted, as long as it was fruit. Dad peeled and ate two grapefruits for breakfast every morning. For a while, school lunches saved my older brother Matt and me. We could buy fries, a milkshake, and a hamburger at school. Then Dad got wise and started getting up early to prepare us kids vegetarian lunches—grass salads or sandwiches full of ferns.

15 Suppers? Suppers were terrible. Matt took to eating at his girl friend's house, and he didn't even *have* a girl friend. Mom would study the cookbook and start chopping vegetables and, at six o'clock, when Dad came home, would serve a great heap of cooked and raw seeds, stems, roots, and leaves. Timmy, who was at least allowed a cup of skim milk with each meal, was the first to voice our general discontent. After one particularly green meal, he asked, in a small, wistful voice, "Spee-bur?" It was his name for the local fast-food restaurant, where he apparently hoped to get a Speedy Burger.

16 After a month of this, I was famished. I would have killed for some good food—a steak, some fried chicken, chocolate chip ice cream, scrambled eggs and bacon. I began spending a lot of time at Brenda Sue Bowler's house, in the hope that her mother would invite me to stay for supper. (A total waste of time. The only time she invited me they were having lentil-asparagus soup.)

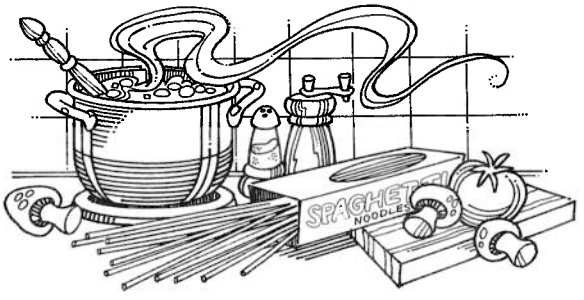
17 Usually, Dad's enthusiasms wane after a while. We waited hopefully for this to happen with the new diet. Not this time. As far as he was concerned, this diet was permanent. And we couldn't argue with him. The fact was (and I looked into it, believe me) he was right. The food we were eating now was a lot better for us all.

18 Halfway through the second month of the diet, I began to dream about spaghetti. Not just spaghetti—spaghetti with meatballs. Spaghetti the way Mom made it, Wednesday spaghetti, with all the bells and whistles. I did more than dream. Secretly, with money I had earned from baby-sitting and odd jobs, I began collecting the ingredients for a spaghetti dinner. The little mound grew under my bed. Finally, I bought ground beef. It wouldn't keep. I had to fish or cut bait!

19 As luck would have it, my mother worked late that day, and Dad called to say he wouldn't get home until six-thirty.

20 "All *right*," Matt said when he saw what I was doing. He had cooked spaghetti once or twice, so he remained to supervise.

21 When Mom and Dad came through the door with Timmy, the table was set. The mingled odors of spaghetti sauce and toasted garlic bread spread through the house.



22 Dad gazed at the sauce bubbling on the stove. He didn't say a word at first. Then he cleared his throat with authority. "Well, just Wednesday-night spaghetti—one meal a week. I guess one meal can't hurt."

23 It's a good thing I made a lot.

24 So now we get one "good" meal a week —spaghetti on Wednesday. We all look forward to Wednesday nights.

25 Lately, I've been dreaming about pizza. Pizza with sausage and ripe olives. We always used to have pizza on Saturday for lunch. . . .

HOW WELL DID YOU READ?

Do you remember the facts?

1. **The story is told from the point of view of**
   - **A** Timmy
   - **B** Gloria
   - **C** Juliet

2. **After Juliet began dreaming of spaghetti, she**
   - **A** began buying spaghetti at school
   - **B** started trying to earn money
   - **C** hid spaghetti fixings under her bed

Did you grasp the main idea?

3. **This story is mostly about**
   - **A** a family's reaction to improving its diet
   - **B** a girl's efforts to defeat her father's latest fad
   - **C** a father's response to his uncooperative family

Do you remember what happened?

4. **When Juliet's father discovered that Juliet and Matt were cheating on their diet at school, he**
   - **A** insisted they eat lunch at home
   - **B** began packing vegetarian lunches for them
   - **C** grounded them until they would promise to improve

Can you draw the right conclusions?

5. **Juliet's father agreed to let the family eat the spaghetti dinner probably because he**
   - **A** wanted to eat it, too
   - **B** could see how hard Juliet had worked
   - **C** didn't want to waste good food

6. **At the end of the story, Juliet's father can best be described as**
   - **A** willful but amusing
   - **B** stern and thoughtless
   - **C** warm-hearted and yielding

7. **Which of these statements about diets probably expresses Juliet's view?**
   - **A** A low-animal-fat diet is healthful but not tasty.
   - **B** Vegetarians should not eat meat and dairy products.
   - **C** Vegetables and fruits are not healthful foods.

8. **Based on the story, which of these foods is healthiest?**
   - **A** Fruit salad on lettuce leaves
   - **B** An American cheese sandwich on whole wheat bread
   - **C** Baked chicken with dressing

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. delicious; tasty *(1)*
2. sweeping motion *(5)*
3. unhappiness *(15)*
4. starving *(16)*
5. decrease; become less intense *(17)*
6. mixed; combined *(21)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. thin *(1)*
- **A** lean
- **B** scarce
- **C** not thick

8. clear *(7)*
- **A** open; free of obstruction
- **B** easily seen; plain
- **C** innocent; free from guilt

9. odd *(18)*
- **A** unusual; peculiar
- **B** occasional; not regular
- **C** out of the way; remote

10. keep *(18)*
- **A** maintain a direction
- **B** go on; persist
- **C** remain fresh

11. set *(21)*
- **A** fixed; decided
- **B** adjusted for proper use
- **C** arranged with tableware

C. br cr dr fr gr pr tr

Often consonants come together in a word to make one sound. This is called a **consonant blend.**

(br) awny
a (cr) oss

Directions: A consonant blend has been left out of a word in each sentence. Decide which of these blends is missing and write the whole word.

12. Today it is __izzling.
13. She shows off to im__ess people.
14. The parachuter hit the __ound hard.
15. Put it in the __unk of the car.
16. Small children are often a__aid of the dark.
17. If you work hard you will get a pay in__ease.
18. Let's cele__ate your birthday with a party.

D. sn sm sp st scr

These letters often come together in words as **consonant blends.**

Directions: A consonant blend has been left out of each word. Decide which of these blends is missing and write the whole word.

19. __ibble
20. te__
21. __iling
22. __rong
23. __ory
24. cla__
25. __ob
26. ju__

E. Sometimes the letters *re* and *un* are **not prefixes.** Then they are part of the base word.

rewrite, replace
rest, rented

In *rewrite* and *replace, re-* is a prefix. It has been added to the base words to mean "again" or "back." In *rest* and *rented,* the letters *re* are not a prefix. They are part of the base word.

Directions: In some of these words the letters *re* and *un* are prefixes. In some they are not prefixes. If there is a prefix, write **P**; if there is no prefix, write **N.**

27. unable
28. read
29. united
30. unwilling
31. really
32. rewrite
33. recover

11

by George Kent

Mister Imagination

1 There were very few places in the world that Jules Verne, the *writer,* did not visit. He went round the world a hundred times or more. Once he did it in eighty days, unheard of in the nineteenth century. He voyaged sixty thousand miles under the sea, whizzed around the moon, explored the center of the earth, and chatted with natives in Australia.

2 Jules Verne, the *man,* was a stay-at-home. He was more apt to be tired from writer's cramp than from traveling. He did make a few visits to Europe and North Africa. And he made one six-week tour of New York State. But that was all. He spent less than one of his seventy-seven years really traveling. Yet he was the world's most extraordinary tourist.

3 His books are crowded with hunting and fishing expeditions. Jules actually went hunting only once. Then he raised his gun and shot off the game warden's hat!

4 He never held a test tube in his hand. But he was an inspiration to the scientist in the laboratory. Long before radio was invented, he had TV working in his books. His name for it was phono-telephoto. He had

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helicopters fifty years before the Wright brothers flew their first plane at Kitty Hawk. In fact, there were few wonders of the twentieth century that this man of the nineteenth century did not foresee. In his stories you can read about neon lights, moving sidewalks, air conditioning, skyscrapers, guided missiles, tanks, electrically operated submarines, and airplanes.

5 Many people took his ideas seriously. One reason was that he wrote about these marvels in such exact detail. Learned men would argue with him. Experts in mathematics would spend weeks checking his figures. When his book about going to the moon was published, five hundred persons volunteered for the next expedition.

6 He inspired many famous people. Admiral Richard E. Byrd, returning from his flight across the North Pole, said that Jules Verne had been his guide. Simon Lake, father of the modern submarine, wrote in the first sentence of his autobiography: "Jules Verne was the director general of my life." He started many other men thinking. Among them were the inventor of the helicopter and the creator of the telegraph.

7 Verne's first book was *Five Weeks in a Balloon*. Fifteen publishers looked at it, and fifteen sent it back. In a rage, Jules flung it into the fire. His wife rescued it and made him promise he would try once more. So he tucked the slightly charred manuscript under his arm. He went to show it to one last publisher, a man named Pierre Hetzel. Jules waited nervously while the man read the book through. Finally Hetzel said he would publish it if Jules would rewrite it in the form of a novel.

8 In two weeks Jules had done so. *Five Weeks in a Balloon* became a best seller. It was translated into every great language. At the age of thirty-four, Jules Verne was famous.

9 Verne signed a contract with Hetzel. He promised to produce two novels a year. This he did. In his forty-year career he was actually to write more than one hundred books!

10 Perhaps the best known of all his books is *Around the World in Eighty Days*. It first appeared as a serial in a Paris newspaper. Its hero had made a bet that he could circle the globe in eighty days, and his progress aroused great interest.

11 In every country of Europe people made bets on whether the imaginary Mr. Fogg would arrive in London in time to win his bet. Verne kept the popular interest alive. His hero rescued a widow from death and fell in love with her. He was attacked by Indians while crossing the American plains. Arriving in New York, he saw the ship that was to take him to England disappearing over the horizon —without him.

12 All the big steamship companies offered Verne large sums of money if he would put Fogg on one of their ships. The author refused. Instead, he had Fogg charter a ship. As the world held its breath, Fogg reached London with only minutes to spare.

13 Many of Verne's other books were set in the future. In these stories, people made synthetic diamonds and developed a convertible automobile-ship-helicopter-plane. They received news flashes on television, worked in

giant skyscrapers, and rode to work on highways much like the ones we ride today. It is hard to believe that the books were written over one hundred years ago.

14 Jules Verne's last years were not happy ones. He lived such an isolated life that many gossips said there was no such person as Jules Verne. What was worse, the thinkers of the time began to sneer at him and his ideas. His last novels, filled with fear for the world's future, reflect his unhappiness.

15 Ill and nearly blind, Verne died in 1905. The world mourned him. One newspaper wrote: "The old storyteller is dead. It is like the passing of Santa Claus."

16 Jules Verne had lived to see many of his fancies come true. But this had not surprised him, for he had once said: "What one man can imagine, another man can do."

HOW WELL DID YOU READ?

What was the author's purpose?

1. **The author mentions two Jules Vernes to show that**
   - **A** there were two men named Jules Verne
   - **B** Jules Verne published his books under a different name
   - **C** Jules Verne had two different sides

Did you understand why?

2. **Many people believed in Verne's inventions because he**
   - **A** was known as a brilliant scientist
   - **B** tested his inventions before writing about them
   - **C** described his inventions in detail

3. **Verne threw his first book into the fire because**
   - **A** he felt it was poorly written
   - **B** his wife didn't like it
   - **C** no one would publish it

4. ***Around the World in Eighty Days* was popular mainly because of its**
   - **A** realism
   - **B** suspense
   - **C** foresight

Did you read carefully?

5. **Verne's early books set in the future contained**
   - **A** great fear about the world's future
   - **B** sarcastic replies to his critics
   - **C** mention of many inventions now in use

6. **In rewriting *Five Weeks in a Balloon,* Verne was**
   - **A** stubborn
   - **B** rapid
   - **C** cautious

Can you draw the right conclusions?

7. **The fact that learned men argued with Verne showed that they**
   - **A** respected his ideas and took them seriously
   - **B** had less imagination than he had
   - **C** knew he could easily be proved incorrect

8. **If Jules Verne were writing today he would be most likely to write about**
   - **A** a trip to the North Pole
   - **B** the latest scientific discoveries
   - **C** life in outer space

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it.

Directions: Find the word in the paragraph that means

1. spoke casually *(1)*
2. something that moves a person to action *(4)*
3. know ahead of time *(4)*
4. fury *(7)*
5. changed from one language into another *(8)*
6. story published regularly, part by part *(10)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

7. game *(3)*
- **A** competitive amusement
- **B** hunted wild animals
- **C** project; plan

8. tanks *(4)*
- **A** armored vehicles used in warfare
- **B** containers for liquids
- **C** aquariums

9. figures *(5)*
- **A** statues
- **B** human shapes
- **C** numbers

10. set *(13)*
- **A** put into type
- **B** placed in a surrounding
- **C** made immovable

11. passing *(15)*
- **A** extending
- **B** dying
- **C** slipping by

C. Words are arranged in **alphabetical order** in the dictionary.

all
big
camel

Directions: Read the words in each line. Write the word that would come first if they were put in alphabetical order.

12. question, sample, parents, ranch
13. under, over, victim, wonderful
14. hanger, gracious, jewel, island
15. beggar, dentist, haircut, important
16. hamburger, fast, England, invite
17. pickle, spider, opportunity, type
18. uncle, ankle, barnacle, package

D. When words begin with the same letter, you need to look at the second letter to see whether they are in **alphabetical order.**

ba rn
be autiful
br ought

Directions: Read the words in each line. They are not in alphabetical order. Write the word that is out of order.

19. tender, tinder, truth, thistle
20. cup, Coke, crowing, cygnet
21. science, separate, sound, save
22. brain, badly, bench, birch
23. error, estimate, elephant, exercise
24. fatal, frog, feast, finger
25. picnic, prose, pleasant, pounded
26. neighbor, nugget, nib, nominal

E. When the first two letters of words are alike, you need to look at the third letter to put the words in **alphabetical order.**

hap py
har bor
has te

Directions: Read the words in each line. Write the word that should come last in alphabetical order.

27. fill, figure, fishing, fig
28. party, pantry, pastry, payday
29. sensible, secret, separate, sequin
30. cunning, cut, curt, cupid
31. puppet, purpose, pudding, pull
32. happy, haven, handout, hard
33. open, option, opal, opportunity

If you enjoyed reading the Red Power Builders,
you might also enjoy the following Literature Selections:

4. *Adventures of a Haversack*
5. *Echo from Ithaca*
6. *The Dead Man*

1

A POUND OF BUTTER

Author Unknown

1 One winter evening, a country storekeeper in Vermont was going about closing up his shop for the night. While he was standing outside in the snow putting up the window shutters, through the glass he could see Seth, a lazy, good-for-nothing fellow, still lounging about inside. As the grocer watched, Seth grabbed a pound of fresh butter from the shelf and concealed it in his hat. No sooner did the storekeeper see the act than he hit upon exactly the right revenge. He would punish the thief, and at the same time he would satisfy his own appetite for fun to the fullest.

2 "I say, Seth," said the storekeeper, coming in and closing the door after him, slapping his hands over his shoulders and stamping the snow off his feet. Seth had his hand on the door, his hat on his head, and the roll of butter in his hat. He was, naturally, anxious to leave as soon as possible.

3 "I say, Seth, sit down," said the grocer in a friendly tone. "I reckon, now, on such a cold night as this a little something warm to drink would not hurt a fellow."

4 Seth felt very uncertain. He had the butter and was eager to be off, but the temptation of something warm to drink made him hesitate. The matter was quickly settled when the rightful owner of the butter took

From "Concerning a Pound of Butter" in The Family Book of Humor, *edited by Helen Hoke, published by Doubleday & Co.*

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Seth by the shoulders and planted him in a seat close to the stove. Now Seth was cornered. He was surrounded by boxes and barrels in such a way that if the grocer kept in front of him, there was no possibility of getting out. And sure enough, it was in that very place that the storekeeper sat down.

5 "Seth, we'll have a little warm drink," the grocer said. "Without it, you'd freeze going home on such a night as this." As he spoke, he opened the door of the stove and stuffed in as many sticks of wood as he could possibly fit inside.

6 Seth already could feel the butter settling down closer to his hair. A hot drink no longer sounded so appealing to him. He jumped up, declaring that he must go.

7 "Not until you have something warm, Seth. Come, I've got a story to tell you." And Seth was pushed back into his seat by his cunning tormentor.

8 "Oh, it's so hot in here," said the thief, attempting to rise again.

9 "Sit down; don't be in such a hurry," replied the grocer, pushing him back into the chair once more.

10 "But I've got the cows to feed, and the wood to chop, and I must be going," said the unhappy man.

11 "You mustn't tear yourself away like this, Seth. Sit down, let the cows take care of themselves, and keep yourself cool. You appear to be a little fidgety," said the roguish grocer with a wicked smile.

12 So Seth was forced to stay where he was. The next thing he knew, the grocer was bringing out two glasses filled with a steaming hot drink. In Seth's present situation, hot as he was, the very sight of such a thing would have made his hair stand on end—had it not been well oiled and kept down by the melting butter.

13 "Seth, I will give you a toast now, and you can butter it yourself," said the grocer, with such an innocent air that poor Seth could not believe that the theft had even been suspected. "We will drink to a Christmas goose, well roasted, eh? I tell you, it's the greatest eating in the world. And Seth, don't you ever use hog's fat or common cooking butter to baste it with. Come, now, Seth, taste your butter—I mean, taste your drink."

14 Poor Seth now began to smoke as well as melt. He could not even open his mouth; it was sealed up as if he had been born dumb. Streak after streak of the butter came pouring from under his hat, and the handkerchief he wore tied around his neck was already soaked with the greasy overflow.

15 Talking away as if nothing were the matter, the fun-loving grocer kept on stuffing wood into the stove while poor Seth sat upright, his back against the counter and his knees almost touching the red-hot furnace.

16 "Cold night, this," said the grocer in a casual, conversational way. Then, as if surprised, he remarked, "Why, Seth, you seem to be perspiring as if you were warm! Why don't you take your hat off? Here, let me put your hat away for you."

17 "No!" exclaimed poor Seth at last, unable to stand it a moment longer. "No, I must go; let me out; I ain't well; let me go!"

18 A greasy waterfall of butter was now pouring down the poor man's face and neck, soaking into his clothes, and trickling down his body into his boots. He was bathed in oil from head to toe.

19 "Well, then, good night, Seth, if you really must go," said the humorous Vermonter. And just as his unhappy victim darted out the door he added, "I say, Seth, I reckon the fun I've had out of you is worth the money, so I shan't charge you for that pound of butter in your hat."

HOW WELL DID YOU READ?

When did it happen?

1. **The grocer discovered Seth's theft**
   - **A** at the moment it occurred
   - **B** after he went inside
   - **C** when Seth tried to leave

2. **Seth realized that the theft was known when the grocer**
   - **A** spoke to him as he left
   - **B** proposed a toast
   - **C** stuffed wood in the stove

Did you understand why?

3. **The reason the grocer did not turn the matter over to the law was probably that he**
   - **A** knew he could not prove Seth was a thief
   - **B** did not think that the theft was important enough
   - **C** wanted to punish Seth more severely

4. **Seth stayed long after closing time because he was**
   - **A** interested in the grocer's story
   - **B** hoping to be able to return the butter
   - **C** trapped so that escape was impossible

How careful was your reading?

5. **This story took place in a**
   - **A** small Vermont town
   - **B** city in the East
   - **C** British village

6. **The season in which the story took place was**
   - **A** fall
   - **B** winter
   - **C** not mentioned

Did you gain insight into the characters?

7. **Seth can best be described as**
   - **A** dull-witted
   - **B** cunning
   - **C** bitter

8. **The grocer's friendliness to Seth was**
   - **A** sincere
   - **B** unintentional
   - **C** exaggerated

Did you get the point?

9. **The real victim in this story was**
   - **A** unaware that he had been punished
   - **B** triumphant about the punishment
   - **C** punished in a very fitting way

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. hid *(1)*
2. way of returning an injury *(1)*
3. attraction *(4)*
4. clever; sly *(7)*
5. playful; mischievous *(11)*
6. careless; informal *(16)*
7. moved suddenly and quickly *(19)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

8. glass *(1)*
- **A** windowpane
- **B** mirror
- **C** container for drinking

9. settled *(4)*
- **A** clarified
- **B** established
- **C** decided

10. toast *(13)*
- **A** browned bread
- **B** drink in honor of a person
- **C** person who is honored

11. baste *(13)*
- **A** strike; beat
- **B** sew with loose stitches
- **C** moisten while roasting

12. charge *(19)*
- **A** blame
- **B** put down as a debt
- **C** attack vigorously

C. compl(ai)n s(ea)l f(oa)m

When two **vowels** come together in a word, usually the first vowel is long and the second is silent.

Directions: In each word *ai, ea,* or *oa* is missing. Think of the word that fits the meaning and write it. Draw a line through the vowel that is silent.

13. __gle (a bird)

14. p__nt (liquid for coloring things)

15. l__f (package of bread)

16. l__f (green part of a plant)

17. l__d (cargo)

18. str__m (small river)

19. st__m (what comes from boiling water)

D. ta / ble un / cle mar / ble

If a word ends in *le,* the consonant just before the *le* usually begins the last **syllable.** Words that end in *ckle* are exceptions. The *k* goes with the first syllable.

pick / le

Directions: Write each word and draw a line between the syllables.

20. tremble

21. spangle

22. buckle

23. gargle

24. twinkle

25. ankle

26. cycle

E. *mis* = wrong; badly
dis = not; opposite of

The **prefixes** *mis-* and *dis-* can be added to many words you know to change their meanings.

mis + behave = misbehave (act badly)
dis + honest = dishonest (not honest)

Directions: Find the word in column II that matches each meaning in column I. Write the word.

I	II
27. put in the wrong place	disappear
28. not organized	misstep
29. opposite of agree	misname
30. bad luck	misplace
31. take a wrong step	disagree
32. vanish	misfortune
33. name wrongly	disorganized

ADVENTURE WITH A PET LION IN AFRICA

Elsa Kills a Buffalo

by Joy Adamson

1 One morning we were walking quietly along the river. Elsa was with us, full of energy and, judging by the twitching of her tail, having a wonderful time. Having walked for two hours, we were looking for a place to have breakfast. Suddenly I saw Elsa stop short, ears cocked and body tense. The next moment she was off, jumping noiselessly down the rocks along the river. Then she disappeared into the thick brush below.

2 We had stopped to wait to see what she had discovered. Then we heard what I thought was an elephant trumpeting. Deep vibrations shook the air. I was sure that there was more than one elephant in the thicket. My husband, George, disagreed. He said that the noise was made by a buffalo. I had heard many buffaloes making different kinds of bellows, but never one that sounded so much like an elephant.

3 We waited for at least five minutes, hoping that Elsa would get bored

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with her big friends. She usually did after a short time. Then came a deep rumbling sound. Before I realized what was happening, George leaped down the rocks, saying that Elsa was in trouble. I followed as fast as I could, but stopped when the sound of violent bellowing began again just ahead. I felt most uneasy as I pushed through the thick brush. I imagined that at any moment an angry elephant would break through and squash everything in its path. The men and I stopped and called to George not to go on, but nothing would stop him. He disappeared behind the green walls of creepers and trees.

4 Now we heard an ear-splitting scream, followed by urgent shouts from George: "Come, quick, quick!" My heart turned to lead. An accident must have happened. I raced as fast as I could through the thicket with terrible scenes flashing through my mind. But soon, thank God, I saw George's sunburnt back through the trees. He was standing upright, so he had to be all right.

5 Again he told us to hurry. When I got to the riverbank, I saw Elsa. She was dripping wet, sitting on top of a bull buffalo in the middle of the rapids. I could not believe my eyes. Here was a buffalo helplessly forced down with his head half under the water, while Elsa tore away at his thick skin and attacked him from every angle.

6 We could only guess what had happened in the ten minutes since I first heard my "elephant noise." Elsa must have found the buffalo while he was resting close to the water. She had chased him toward the river. While he was trying to cross the river he must have fallen on the slippery rocks of the rapids, and Elsa had taken advantage of his difficulty. She had jumped on him. Then she had held his head under water until he was half drowned and too tired and weak to get up. As soon as Elsa gave him a chance, George ended the poor buffalo's agony with a bullet.

7 The next problem was to get the dead beast out of the river. We would have to drag it through the rapids between the slippery rocks. It would not be easy to pull twelve hundred pounds over such ground, especially with an excited lioness guarding it.

8 Elsa, intelligent as she was, saw our difficulty. She seized the buffalo by the root of the tail and did her part while the three men pulled at the head and legs. With much laughter at Elsa's efforts, the men succeeded in hauling out the buffalo body. Then they cut it up. Here again, Elsa was most helpful. Each time one of the big, heavy legs was cut from the buffalo's body she at once dragged it into the shade of a bush, saving the men the work of doing so later on. Luckily, we were able to bring a truck to within a mile of the place. We managed to get most of the meat to camp in the truck.

9 Elsa was exhausted. She must have swallowed a lot of water during her battle with the great beast. She had spent at least two hours up to her neck in the fast current of the river. But, tired as she was, she would not leave her kill until she knew that it was safe and that it had been completely cut up. She waited until it was all finished before she rested in the shade of a bush.

10 I joined her a few moments later to relax after the excitement. She licked my arm, embraced me with her paw, and hugged me. She was very gentle. She took care to avoid scratching me with the claws that only a short

time ago had been deadly to the thick skin of a powerful buffalo.

11 It would have been a remarkable achievement for even a wild lion to kill a buffalo bull single-handed. But Elsa had been raised as a pet. She had just learned how to hunt. Although the river had been a big help to her, it had taken a good deal of intelligence for Elsa to do it. I felt very proud of her.

HOW WELL DID YOU READ?

When did it happen?

1. **The killing of the buffalo took place in the**
   - **A** morning
   - **B** late afternoon
   - **C** evening

2. **The author was certain that a buffalo had made the "elephant noise" when**
   - **A** she heard it a second time
   - **B** her husband identified it
   - **C** she saw the buffalo

Did you understand why?

3. **The author's husband called to her to hurry because**
   - **A** the scene was so unusual
   - **B** Elsa needed immediate help
   - **C** he had been injured

4. **George shot the buffalo out of**
   - **A** anger
   - **B** pity
   - **C** necessity

How carefully did you read?

5. **There is evidence in the story that Elsa had**
   - **A** previously shown interest in big game
   - **B** never before had experience in hunting
   - **C** killed small game as she killed the buffalo

6. **The purpose for which the buffalo meat was saved was**
   - **A** to supply the whole camp
   - **B** to feed Elsa
   - **C** not mentioned

What was the similarity?

7. **In handling the buffalo's body and in greeting the author, Elsa showed great**
   - **A** strength
   - **B** humor
   - **C** carefulness

Can you draw the right conclusions?

8. **The buffalo would probably have made an escape if**
   - **A** George had come later
   - **B** his bellow had gone unheard
   - **C** he had crossed the river

9. **Elsa's greatest advantage in hunting was her**
   - **A** gentleness
   - **B** experience
   - **C** intelligence

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. quick jerking motion *(1)*
2. dense growth of shrubs *(2)*
3. crush; flatten *(3)*
4. demanding immediate action *(4)*
5. great pain *(6)*
6. fatal; destructive *(10)*
7. reared; brought up *(11)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

8. brush *(1)*
- **A** light touch
- **B** short quarrel
- **C** undergrowth; plants

9. green *(3)*
- **A** sickly
- **B** grass-colored
- **C** fresh; new

10. difficulty *(8)*
- **A** trouble
- **B** hardness
- **C** quarrel

11. fast *(9)*
- **A** rapid
- **B** not easily moved
- **C** reckless; wild

12. licked *(10)*
- **A** overcame; defeated
- **B** passed lightly over
- **C** touched with the tongue

C. Words are arranged in **alphabetical order** in the dictionary.

all
big
camel

Directions: Read the words in each line. One of them is not in alphabetical order. Write the word that is not in order.

13. muffin, red, comma, start

14. every, heaven, sister, derby

15. van, orange, practical, weaver

16. kitchen, cancel, frighten, lesson

17. divide, forehead, tennis, excellent

18. lemon, radish, napkin, pepper

19. absent, handsome, top, ghost

D. When words begin with the same letter, you need to look at the second letter to see whether they are in **alphabetical order.**

te am
th rowing
tu b

Directions: Read the words in each line. Write the word that should come last in alphabetical order.

20. character, cent, coffee, candy

21. balance, British, between, boil

22. stable, sorry, success, sign

23. post, party, pen, prunes

24. willow, weapon, whole, woman

25. mice, mouse, mean, muddy

26. bleat, boom, brown, bear

E. When the first two letters of words are alike, you need to look at the third letter to put the words in **alphabetical order.**

col lar
com pose
cos tume

Directions: Read the words in each line. Write the word that should come first in alphabetical order.

27. pram, prepare, prompt, prince

28. folder, foreign, foggy, fond

29. grist, grope, gray, grumble

30. high, hinder, hiccup, hitting

31. storm, still, stem, stump

32. who, whey, whittle, what

33. able, abhor, abysmal, abound

3

MRS. FIELDS (as in the Cookies)

by Ralph Gardner, Jr.

My goal is to create a company that is really excited about being there, about being a participant in life.—Debbi Fields

Courtesy of Mrs. Fields Cookies

Debbi Fields

1 Perhaps you've heard of Debbi Fields. She is the founder of Mrs. Fields Cookies, Inc. It is one of the fastest-growing store chains in the United States. It started with one small store in Palo Alto, California. Now there are more than two hundred stores in various locations from Hawaii to New York.

2 What Debbi has done is little short of extraordinary. In 1976, at the age of nineteen and recently married to Randy Fields, Debbi decided she wanted to share with the world the cookies she baked for herself and her friends. She asked Randy, who was ten years older and already a successful economist, to lend her $50,000 to open a cookie store. He thought she was crazy, but he also thought it would be a great way for her to learn about business.

3 In his work Randy Fields has met some of the most competitive men in the world. Nonetheless he believes his wife is more competitive than any of them. Her competition is not other-directed, it's inner-directed; no matter what she does, she wants to do her best, he explains.

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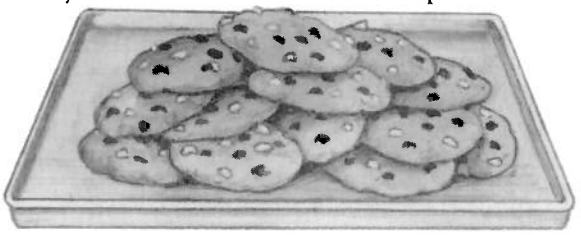
4 A banker friend advised Randy, "It's obvious it's not going to be a great business, but the worst that's going to happen is you're going to lose $50,000 and, after all, it's a tax shelter."

5 So Randy lent Debbi $50,000, thinking he could write off the loss on his income tax, and she opened her store. She used the same recipe in the store she had used at home—with real butter, real chocolate, real vanilla. Nobody bought. "People came by, they looked at the cookies, and they didn't buy them," Debbi remembers. "And I knew they were great."

6 She decided the only way to convince people it was a great cookie was to get them to eat it. If the customers weren't going to come to her, she'd go to them. "I piled the cookies on my cookie sheet and I walked up and down



the streets of downtown Palo Alto, finding people and saying, 'Please, would you just try these cookies?' And they tried them and loved them and followed me back to the store."

7 Debbi proved both her husband and the banker wrong. The $50,000 investment has grown into a multimillion-dollar company.

8 Debbi does not make her cookies just for the money, however. She makes them for love. She says, "Most people would say, 'Debbi Fields is so successful because she's making lots of money.' That's not success in my mind." In Debbi's opinion, true success is "a company of people who . . . in the morning say to themselves, 'We're going to go out and sell some cookies and make some customers happy, and we're going to do some really nice things for the world.'"

9 This attitude has helped Debbi's stores become colorful oases that stand out in sterile, shopping-mall America. The young women in ruffled blouses and red skirts offer smiles and free cookies to customers just as Debbi used to do in her first store in Palo Alto.

10 Debbi seems almost too good to be true. "Everybody thinks that when they first meet her," Randy says. Debbi is the youngest of five highly competitive sisters. "She came from a family where it was difficult to please. So my guess is that her whole orientation is toward pleasing people," Randy says. This includes both her employees and her customers. She is more interested in making people happy than in making money.

11 Randy is a financial wizard, but he says he's puzzled by Debbi's success. "As a business person having watched this thing and having looked at a whole bunch of others, I'm now convinced that too many people focus on the making of money, [and] when you focus on money, it makes it easy to compromise your standards. Debbi runs the business on aphorisms and one of them is, 'Quantity follows quality.'"

12 Debbi adheres to the same high standards of quality in her family life. Her daughters receive a great deal of attention and accompany their parents on business trips. Her relationship with Randy both personal and professional is excellent. The Fieldses are active in community affairs in Park City, Utah, their home. They donate about one quarter of their earnings to charity.

13 In Debbi's game plan, the cookie stores may prove to be the cornerstone of an empire. She hopes to sell a frozen cookie product in grocery stores, to open a chocolate store in California, and to open a third type of store which she's keeping secret. Her goal is to someday be as familiar in American homes as Betty Crocker is.

14 Debbi doesn't look like Betty Crocker, although many customers assume that she does. They are shocked when, instead of a kindly old grandmother, Mrs. Fields turns out to be a stunning young woman.

15 Still, Debbi doesn't want her looks or growing fame to interfere with her cookie business. "I was in one of my stores [recently] and customers were asking me for my autograph," she recalls. "I said, 'Why do you want my autograph? It has no value. Here, I'll give you a cookie instead.'"

HOW WELL DID YOU READ?

What were the facts?

1. **Debbi opened her first store because she wanted to**
   - **A** show her husband she could be successful
   - **B** share her cookies with the world
   - **C** make lots of money

2. **The first store was in**
   - **A** New York
   - **B** Hawaii
   - **C** California

3. **When customers first meet Debbi, they are usually shocked by her**
   - **A** appearance
   - **B** friendliness
   - **C** aggressiveness

What was the motive?

4. **Randy consulted a banker so that the banker would**
   - **A** tell him if Debbi's business could make money
   - **B** advise Debbi about ways to create a people-oriented business
   - **C** talk Debbi out of starting a business of her own

5. **Randy lent Debbi the money to open her store because he thought he'd be able to**
   - **A** double his money in one year
   - **B** quit his job and help run the business
   - **C** use the losses as a tax write-off

6. **Debbi says her goal is to build a company that**
   - **A** helps other companies make profits
   - **B** improves the quality of life
   - **C** is known all over the world

Can you draw the right conclusions?

7. **When Debbi opened her first store, the customers didn't buy because**
   - **A** they didn't know what the cookies tasted like
   - **B** she didn't use natural ingredients in the recipe
   - **C** the store was too sterile looking to attract business

8. **Compared to other business people, Debbi is said to be**
   - **A** not as competitive
   - **B** just as competitive
   - **C** more competitive

9. **The author seems to believe that Debbi's success is extraordinary because she**
   - **A** was so young when she started her business
   - **B** started the business with very little money
   - **C** had unskilled people advising her

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. remarkable; very unusual *(2)*
2. striving; wanting to win *(3)*
3. stake; money used to start a business *(7)*
4. dull; not very interesting *(9)*
5. concentrate one's attention *(11)*
6. sayings; short statements of principle *(11)*
7. supports consistently; clings *(12)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

8. chains *(1)*
   - **A** rows of connected metal links
   - **B** related groups of businesses
   - **C** groups of cells joined end to end

9. sheet *(6)*
   - **A** piece of paper
   - **B** cotton bed covering
   - **C** flat metal pan

10. standards *(11)*
   - **A** levels of excellence
   - **B** long tapering flags
   - **C** upright objects used as supports

11. goal *(13)*
   - **A** finish line
   - **B** aim or purpose
   - **C** score made in a game

12. shocked *(14)*
   - **A** jarred by electricity
   - **B** emotionally upset
   - **C** extremely surprised

C. When two consonants come between two vowels in the middle of a word, the first consonant usually goes with the first syllable and the second with the next syllable.

har / vest
cir / cus

Directions: Write each word. Draw a line between the syllables.

13. tender
14. aspic
15. bamboo
16. circus
17. helmet
18. bandit
19. letter

D. The **suffix** *-ly* means "like" or "in a certain way." It can be added to many words you know.

quick + *ly* = quickly
man + *ly* = manly

Directions: Add *-ly* to each word below to change its meaning. Write the new word you make.

20. glad
21. cold
22. prompt
23. strong
24. boastful
25. dark
26. exact

E. **open** + ing = opening
un + **truth** + ful = untruthful

Many words are built on **base words** that you know. The base word is your key to understanding the longer word.

Directions: The words in each line are built on the same base word. Find the base word and write it.

27. fixture, fixed, fixing
28. mastery, masterpiece, mastered
29. indifferent, difference, differs
30. honorable, honorary, honored
31. soothsayer, saying, sayable
32. freedom, freed, freeing
33. faithful, unfaithful, faithless

4

by Hal Butler

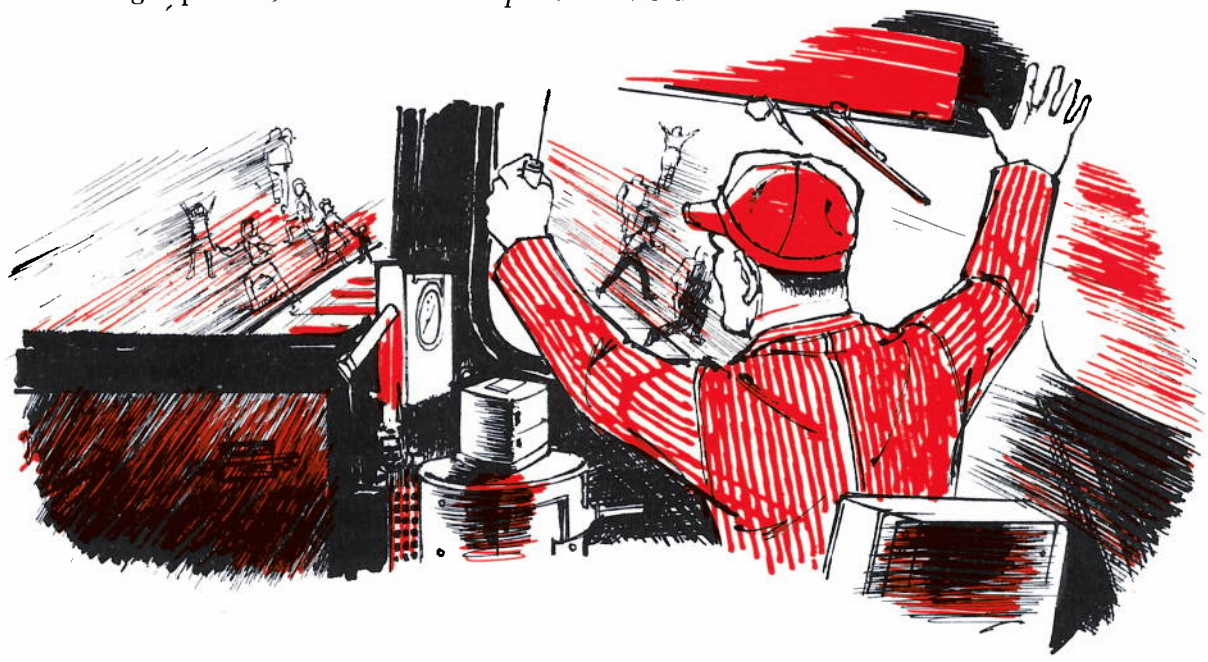
RUNAWAY TRAIN

1 The run of the *Federal Express* had been troublesome from the beginning. The train had left Boston on schedule, expecting to make the 459-mile run in its usual eight hours and forty minutes. Only twenty-seven miles out of Providence, however, there was a series of violent jerks, and the engineer stopped the train for inspection. It was found that the brakes on ten of the thirteen cars were jammed. By the time adjustments were made and the *Federal Express* was rolling again, it was fifty-six minutes behind schedule.

2 On the run to New Haven, Connecticut, the brakes were applied several times and worked perfectly. In New Haven three cars were added, and the brakes were tested again and found in perfect order.

3 Picking up time, the *Federal Express* rumbled into New York City's Pennsylvania Station only thirty-eight minutes late. There engineer Harry Brower, red-faced and grizzled, took over the train. His engine was backed on, and another routine check of the brakes was made.

4 Brower decided to try to make up the thirty-eight minutes and deliver the *Federal Express* to Washington on schedule. By the time it reached Baltimore, the train had picked up another three minutes. Between Baltimore and Washington, Brower really put on speed, roaring along at a crisp eighty miles an hour. When he reached Signal Tower 1339, two miles out of Washington's Union Station, he applied the brakes to slow the train. Nothing happened; the brakes didn't hold.



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5 The veteran engineer's scalp prickled with horror. As the landscape whirled by in a nightmarish blur, Brower went into emergency action. He threw the controller off, opened the sander valve, and set his automatic brakes. These drastic actions should have brought the big *Federal Express* to a sudden stop—but they didn't.

6 That meant just one terrifying thing. The long, heavy train had no brakes whatever. Already it was racing through an underpass, bearing down relentlessly on the complicated network of yard tracks.

7 Brower had one last hope—to jam the motors into reverse. He tried, but the overload relays blew under the strain. Now there was nothing left to do. It was impossible to stop the train. The engineer felt sick as he thought of the unsuspecting passengers and the hundreds of people who would be milling about the station right in the path of the train. Desperately he reached up and pulled the whistle cord. The horn blasted its warning as the train roared into Washington. It kept blasting, warning everyone up ahead that the train coming was a runaway.

8 In the third car, conductor Thomas Murphey realized that the train was going too fast. He tried to brake it by opening an emergency valve on the platform. The attempt was futile. The train raced on unchecked. All he could do was warn passengers to brace themselves in their seats or lie on the floor.

9 Meanwhile, Brower stuck grimly to his throttle, his body tense. What would happen when the *Federal Express* ran out of track? With sparks flying from its wheels, the runaway train raced by "C" Tower. In the tower a train director saw the 1,450 tons of murder headed for the center of the station. There was no time to switch it onto a siding. Quickly he grabbed the phone. "Number 173's running away!" he screamed.

10 On receiving the message, the director in "K" Tower looked up. There was Number 173 thundering toward him, whistle shrieking, sparks flying! There was no stopping it. All he could do was warn people out of the way. He grabbed a phone and got the stationmaster's office. "Get out of there!" he shouted at the clerk who answered the call. "A runaway is coming at you on Track 16!"

11 The clerk went into immediate action. He shouted at the others, telling them to run for their lives. A white-haired telegrapher swept up a crippled secretary and carried her to safety. The clerk, risking his life, rushed from the office and warned a cleaning woman and an electrician out of the way.

12 In the cab of Number 173, Brower gritted his teeth. He saw the station loom up before him. Then the locomotive smashed into the stop block and leaped over it. On roared the train—through the stationmaster's office and into the concourse. It plunged toward a door leading into a waiting room crowded with people.

13 It never quite made the waiting room. Just as its headlight reached the door, its weight made the concrete floor of the concourse collapse. Hissing like a wounded and dying animal, the engine plummeted into the basement of the station. It pulled one car down with it.

14 There was a moment of weird silence following the din. Then, as if breathing its last,

the huge locomotive hissed once more and lay still.

15 Brower crawled from the cab of the engine. He was shaken but otherwise unhurt. He didn't realize it at the time, but his alertness in sounding the whistle had saved many lives.

16 Miraculously, no one died in the crash. About eighty people were hurt, but only eight of them seriously enough to be hospitalized.

17 In the stationmaster's office, the clock had stopped at 8:38 A.M., registering the exact time of the accident. The *Federal Express* had made up most of its lost time. It had arrived at its destination just eighteen minutes late.

HOW WELL DID YOU READ?

Do you remember the reason?

1. **The train was behind schedule because of**
   - **A** a late start
   - **B** brake failure
   - **C** a fuel shortage

Where did it happen?

2. **The first sign of trouble occurred**
   - **A** several miles out of Providence
   - **B** between Baltimore and Washington
   - **C** near Pennsylvania Station

3. **When Brower found that he could not stop the train, he was located**
   - **A** just outside Baltimore
   - **B** midway between New York and Baltimore
   - **C** two miles from his destination

Did you understand why?

4. **Brower raised the train's speed to eighty miles an hour in order to**
   - **A** bring it in on schedule
   - **B** test the locomotive's brakes
   - **C** warn people up ahead

5. **The cause of the brake failure was**
   - **A** the number of cars on the train
   - **B** improper repair and testing
   - **C** not stated

Did you notice the comparison?

6. **The author compared the stopped train to a**
   - **A** wrecked ship
   - **B** fallen tree
   - **C** dying animal

Can you draw the right conclusions?

7. **The author told about the stopped clock in the station in order to**
   - **A** make the main point of the story
   - **B** increase the feeling of suspense
   - **C** give the ending an odd twist

8. **The people in the waiting room owed their safety to**
   - **A** Brower's quick thinking
   - **B** the stationmaster's courage
   - **C** a lucky accident

9. **Blowing the whistle probably saved the lives of the**
   - **A** men in the tower
   - **B** people in the stationmaster's office
   - **C** neither **A** nor **B**

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. having rough, grayish hair *(3)*
2. stubbornly *(6)*
3. useless *(8)*
4. sternly; resolutely *(9)*
5. come into view *(12)*
6. fell straight down *(13)*
7. loud, constant noise *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

8. order *(2)*
- **A** succession
- **B** arrangement
- **C** condition

9. unchecked *(8)*
- **A** not tested
- **B** not controlled
- **C** not marked

10. switch *(9)*
- **A** whip; beat
- **B** jerk sharply
- **C** turn aside

11. way *(10)*
- **A** path
- **B** method
- **C** distance

12. following *(14)*
- **A** imitating
- **B** coming after
- **C** obeying

C. compl(ai)n s(ea)l f(oa)m

When two **vowels** come together in a word, usually the first vowel is long and the second is silent.

Directions: In each word *ai, ea,* or *oa* is missing. Think of the word that fits the meaning and write it. Draw a line through the vowel that is silent.

13. s__k (let stand in water)

14. pl__d (beg)

15. tr__n (part of a railroad)

16. p__ch (fruit)

17. s__t (something to sit on)

18. pl__n (flat land)

19. gr__n (wheat; rye; oats)

D. ta / ble un / cle mar / ble

If a word ends in *le,* the consonant just before the *le* usually begins the last **syllable.** Words that end in *ckle* are exceptions. The *k* goes with the first syllable.

pick / le

Directions: Write each word and draw a line between the syllables.

20. shingle

21. whistle

22. single

23. wrinkle

24. wriggle

25. knuckle

26. able

E. *mis* = wrong; badly
dis = not; opposite of

The **prefixes** *mis-* and *dis-* can be added to many words you know to change their meanings.

mis + behave = misbehave (act badly)
dis + honest = dishonest (not honest)

Directions: Find the word in column II that matches each meaning in column I. Write the word.

I	II
27. not understand	misrule
28. not follow orders	disprove
29. spell wrong	distrust
30. opposite of regard	misunderstand
31. prove to be not true	disobey
32. opposite of trust	disregard
33. rule badly	misspell

5

Dogs That Have Known Me

by Jean Kerr

1 I have never met a dog that didn't have it in for me. You take Kelly, for instance. He's a wire-haired fox terrier, and I wouldn't say that he's terribly handsome but he does have a very nice smile. What he *doesn't* have is any sense of fitness. All the other dogs in the neighborhood spend their afternoons yapping at each other's heels or chasing cats. Kelly spends his whole day, every day, chasing swans on the millpond. I don't actually worry because he'll never catch one. For one thing, he can't swim. Instead of settling for a simple dog paddle like everybody else, he has to show off and try some complicated overhand stroke, with the result that he always sinks and has to be fished out.

2 Another thing about that dog is that he absolutely refuses to put himself in the other fellow's position. We have a pencil sharpener in the kitchen and Kelly used to enjoy having an occasional munch on the plastic cover. As long as it was just a nip now and then, I didn't mind. But one day he simply lost his head and ate the whole thing. Then I had to buy a new one and of course I put it up high out of Kelly's reach. Well, the scenes we were treated to—and the sulking! In fact, ever since, he has been eating

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things I know he doesn't like just to get even. I don't mean things like socks and mittens and paper napkins, which of course are delicious. Lately he's been eating plastic airplanes, suede brushes, and light bulbs. Well, if he wants to sit under the piano and make low and loving growls over a suede brush just to show me, okay. But frankly I think he's lowering himself.

3 Although, as a gourmet, he was a washout, we did keep saying one thing about Kelly. We kept saying, "He's a good little old watchdog." Heaven knows why we thought so, except that he barks at the drop of a soufflé. In fact, when he's in the basement a stiff toothbrush on the third floor is enough to set him off into a concerto of deep, murderous growls followed by loud hysterical yappings. I used to take real pleasure in imagining the chagrin of some poor intruder who'd bring that cacophony upon himself. Last month we had an intruder. He got in through the porch window and took twenty-two dollars and my wristwatch while Kelly, that good little old watchdog, was as silent as a cathedral.

4 Then there was the dog that gave us the most trouble, a beagle named Murphy. As far as I'm concerned, the first thing he did wrong was to turn into a beagle. I had seen him bouncing around in the excelsior of a petshop window, and I went in and asked the man, "How much is that adorable fox terrier in the window?" Did he say, "That adorable fox terrier is a beagle?" No, he said, "Ten dollars, lady." Now, I don't mean to say one word against beagles. They have rights just like other people. But it is a bit of a shock when you bring home a miniature ball of fluff in a shoebox, and in three weeks it's as long as the sofa.

5 Murphy was the first dog I ever trained personally, and I was delighted at the alacrity with which he took to the newspaper. It was sometime later that we discovered, to our horror, that—like so many dogs—he had grasped the letter but not the spirit of the thing. Until the very end of his days he felt a real sense of obligation whenever he saw a newspaper—*any* newspaper—and it didn't matter where it was. I won't go into the sordid details, except to mention that we were finally compelled to keep all the papers in the bottom of the icebox.

6 It's not just our own dogs that bother me. The dogs I meet at parties are even worse. I don't know what I've got that attracts them. My husband swears I rub chopped meat on my ankles. But at every party it's the same thing. I am sitting in happy conviviality with a group in front of the fire when, without a single bark of warning, the large mutt of mine host hurls himself upon me. My drink flies into space and my stockings are torn before he finally settles down peacefully in the lap of my new black faille. I blow out such quantities of hair as I haven't swallowed and glance at

my host, expecting to be rescued. He murmurs, "Isn't that wonderful? Brucie is usually so distant with strangers."

7 At a dinner party on Long Island last week, after I had been mugged by a large sheep dog, I announced quite piteously, "Oh dear, he seems to have swallowed one of my

earrings." The hostess looked really distressed for a moment, until she examined the remaining earring. Then she said, "Oh, it'll be all right. It's small and it's round."

8 Nowadays if I go anywhere I just ask if they have a dog. If they do, I say, "Maybe I'd better keep away from him—I have this bad allergy." This does not tend to endear me to my hostess. But it's safer. It really is.

HOW WELL DID YOU READ?

What was the purpose?

1. **The author's purpose in this story was to**
   - **A** amuse the reader with tales about dogs
   - **B** inform the reader about various breeds of dogs
   - **C** persuade the reader to get a dog as a pet

What did the writer think?

2. **The author thought that dogs**
   - **A** found her to be interesting
   - **B** wanted to make trouble for her
   - **C** went out of their way to avoid her

3. **The author would probably describe Kelly as**
   - **A** a handsome dog
   - **B** an unusual dog
   - **C** a vicious dog

4. **In the author's opinion, Murphy's main problem was that he**
   - **A** was a beagle
   - **B** liked to eat newspapers
   - **C** didn't like people

How carefully did you read?

5. **The dog Kelly tried to swim by**
   - **A** doing a simple dog paddle
   - **B** using a complicated overhand stroke
   - **C** floating on his back and wagging his tail

6. **What was the result of the intrusion into the author's house?**
   - **A** The intruder was scared off by Kelly.
   - **B** The intruder stole Kelly.
   - **C** The intruder got away with $22.00.

Did you draw the right conclusions?

7. **From the author's description of Kelly's interest in chasing swans, the reader can conclude that Kelly**
   - **A** disliked swans and water
   - **B** was like other dogs in the neighborhood
   - **C** had a keen sense for doing the peculiar

8. **The pet store owner who sold Murphy can best be described as**
   - **A** dishonest
   - **B** helpful
   - **C** unfriendly

9. **The hostess described at the end of the story was distressed because she**
   - **A** thought her party was ruined
   - **B** felt sorry for the author
   - **C** feared for her dog's well-being

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. moody behavior; pouting *(2)*
2. mental distress *(3)*
3. fine wood shavings *(4)*
4. personal duty *(5)*
5. forced; made to do something *(5)*
6. festiveness; gay enthusiasm *(6)*
7. attacked *(7)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

8. paddle *(1)*
- **A** flat wooden stick
- **B** oar for a canoe
- **C** type of swimming stroke

9. shock *(4)*
- **A** bushy mass
- **B** surprise
- **C** violent shake

10. letter *(5)*
- **A** exact meaning
- **B** written message
- **C** athlete's award

11. bark *(6)*
- **A** noise that a dog makes
- **B** outside covering of a tree
- **C** small sailing ship

12. distant *(6)*
- **A** not directly related
- **B** unfriendly
- **C** far away

C. When a word has one consonant between two vowels, it is usually divided into **syllables** this way:

ho / bo

tu / lips

The consonant goes with the letters after it.

Directions: Write each word. Draw a line between the syllables.

13. solo

14. veto

15. labor

16. divan

17. basin

18. vacant

19. molar

D. we would = we'd
could not = couldn't

Sometimes we put two words together and use an apostrophe (') to show where letters have been dropped. The new word is a **contraction.**

Directions: Write the contractions for these words.

20. I will

21. must not

22. you have

23. they will

24. he is

25. we are

26. would not

E. space + ship = spaceship

A **compound word** is made up of two or more words that combine to have one meaning. *Spaceship* is a compound word because each of its parts is a word. *Spaced* is not a compound word because one of its parts is not a word.

Directions: There is one compound word in each sentence. Write the compound word and draw a line between the two words in it.

27. Can someone help me?

28. The house is located nearby.

29. Here is the stagecoach used in the robbery.

30. The woman's coat was threadbare.

31. Don't swim into the underwater reef.

32. This notebook contains all my notes for the year.

33. He became a sharpshooter after much practice.

6

ON LAND AND SEA, ANIMALS PRODUCE

LIVING LIGHT

by Norman T. Mattox

1 Ever since we have gone down to the sea in ships, we have been puzzled and fascinated by the phenomenon called "fiery waters" or "the burning of the seas." At night, whole areas of the sea light up with an eerie glow. Strange as it may look, there is nothing supernatural about this light. It is caused by simple one-celled organisms. This production of light by living organisms is called *bioluminescence.*

2 Most of these single-celled forms make light whenever they are stimulated or irritated by something around them. Some kinds, however, produce light only at night.

3 There are hundreds of kinds of organisms that produce bioluminescence. Of all of these, the fireflies, or lightning bugs, are the best known. Fireflies can control the blinking of their lights so that they serve as signals between males and females. Other insects, such as the cucujo beetle and the lantern fly found in tropical forests, produce a very intense light. An army surgeon once performed a successful operation under the light of a bottleful of cucujo beetles.

4 Another interesting luminescent animal is the ostracod found in the seas of the Orient. This small animal, which lives in the sand, comes out at night. As it moves about, it secretes a luminous substance. It produces a

Based on "Living Light on Land and Sea" by Norman T. Mattox, Science Digest, *1961, by permission of Hearst Magazines.*

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very intense blue light. Most luminescent creatures produce a light that appears to be white or yellow.

5 On the southern coast of Puerto Rico is a lagoon that has one of the greatest amounts of bioluminescence in the world. On dark nights it creates a very dramatic display. As the motor launch takes visitors into the lagoon, curving lines of light fall from the bow. A trail of light is left in the boat's wake. It appears as though a huge floodlight were burning under the launch, and the bow seems to be plowing into a wall of fire.

6 Hundreds of small fish and shrimp, darting away from the boat, stir up the tiny light-producing organisms. Waves from the launch roll under the mangrove trees that border the lagoon. They break on the roots, and make a weird and ghastly light. The launch disturbs large fish, and they look like masses of light as they move rapidly toward deep water.

7 If you dip a bucket of water and put your hand in it, you can see the light roll away from your hand. Hundreds of tiny glowing spots on your skin rapidly disappear as the water runs off or evaporates. Throw the water from the pail overboard and it looks like a shower of stars as it hits the surface of the lagoon.

8 These tiny organisms have color, and are so numerous that they color the water. Some of these organisms cause "red tide," which kills millions of fish in certain parts of the sea. The red tide has appeared off the coast of Florida several times in recent years.

9 Often "balls of fire" roll away from the oars of boaters or the feet of swimmers. These large masses of light are produced by certain types of jellyfish and comb jellies. Several kinds of snails and clams can also produce light when irritated. So can many snails and octopuses. One deep-sea octopus is really grotesque when it turns on its lights. Many squids, especially those that live in the dark depths of the ocean, have complex light organs located on different parts of their bodies and arms.

10 In his log, Columbus referred to "moving torches of light" near the coral reefs of the West Indies. Undoubtedly he had observed the "fire worms" of that area. These are tiny

sea worms that swarm only at certain times of the year. The Pacific palolo worms come out of their burrows in coral masses only at dawn on the last day of the last quarter of the moon in the months of October and November. The Atlantic palolo comes out only during the evening hours of the third quarter of the moon during the months of June and July.

11 An unusual fact about Oriental ostracod is that their light keeps glowing even after they are dead. Their dried bodies can be ground into a powder. When the powder is mixed with water, it will produce light. During World War II, Japanese naval officers used this powder. When they were close to the enemy during blackout night action, they moistened the powder in the palms of their hands. They could read their navigation charts in the dim blue light that it gave.

12 Only a few animals with backbones are able to produce light, and these live in the deep sea. Some have complex lenses and reflectors on their heads or bodies. Others

have lights on the tips of their fins. Their lights are useful in the dark waters. Most of these animals can control the flashing of their lights and use them in different ways. In some, the lights are danger signals. Angler fishes have fingerlike lights which they dangle in front of their large, gaping mouths. Fishes in the darkness are easily caught and eaten.

13 In recent years, scientists have learned to produce light chemically the way these animals do. As we learn more about bioluminescence, it may seem less and less mysterious. But living creatures glowing in the dark will always be beautiful.

HOW WELL DID YOU READ?

Did you pay attention to details?

1. **The light of the Oriental ostracod is a very intense**
   - **A** blue
   - **B** white
   - **C** yellow

2. **"Balls of fire" are caused by**
   - **A** jellyfish
   - **B** tiny red organisms
   - **C** small fish and shrimp

3. **Japanese naval officers read charts by the lights from**
   - **A** bottles of cucujo beetles
   - **B** ostracods
   - **C** lantern flies

4. **Light-producing animals with backbones are**
   - **A** nonexistent
   - **B** found in tropical forests
   - **C** found only in the deep sea

5. **The lights of angler fishes are useful for**
   - **A** warning smaller fish
   - **B** signaling to each other
   - **C** helping them get food

Can you draw the right conclusions?

6. **If you know that *luminescent* means "giving off light," you can guess that *bio* means**
   - **A** sea
   - **B** living thing
   - **C** firefly

7. **There is evidence in the article that bioluminescent animals are most likely to occur in**
   - **A** fresh water
   - **B** warm climates
   - **C** northern areas

Did you see the author's purpose?

8. **The author gives a detailed description of the lagoon in Puerto Rico because it is**
   - **A** mysterious
   - **B** dramatic
   - **C** dangerous

9. **The purpose of this article is to**
   - **A** show how we can use bioluminescence
   - **B** describe instances of bioluminescence
   - **C** analyze the process of bioluminescence

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. unusual occurrence *(1)*
2. living things *(1)*
3. excited *(2)*
4. changes from liquid to gas *(7)*
5. very many *(8)*
6. not simple *(9)*
7. made wet *(11)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

8. intense *(3)*
- **A** strong; vivid
- **B** earnest
- **C** serious

9. found *(4)*
- **A** recovered
- **B** learned
- **C** met with

10. certain *(8)*
- **A** settled
- **B** sure
- **C** some

11. organs *(9)*
- **A** printed journals
- **B** wind instruments with pipes
- **C** body parts with special functions

12. keeps *(11)*
- **A** continues
- **B** defends
- **C** holds back

C. Words are arranged in **alphabetical order** in the dictionary.

airplane
broom
candy

Directions: Read the words in each line. One of them is not in alphabetical order. Write the word that is not in order.

13. character, roses, silent, framework
14. jewelry, lace, interest, nowhere
15. hamburger, risk, tumbler, kite
16. excellent, frantic, marvel, barge
17. xylophone, yellow, zone, wild
18. promise, summer, travel, quick
19. canvas, evaluate, aphid, gall

D. When words begin with the same letter, you need to look at the second letter to see whether they are in **alphabetical order.**

me ans
mo at
mu ddy

Directions: Read the words in each line. Write the word that should come last in alphabetical order.

20. table, tent, turnip, tremble
21. elephant, eager, empire, egg
22. feminine, frail, five, faction
23. umbrella, unusual, ugly, up
24. salary, school, similar, story
25. forever, fragrant, fix, fancy
26. kitchen, knife, keep, kale

E. When the first two letters of words are alike, you need to look at the third letter to put the words in **alphabetical order.**

sti ll
sto rm
stu mped

Directions: Read the words in each line. Write the word that should come first in alphabetical order.

27. ruin, rudder, ruby, running
28. javelin, jam, jar, jasmine
29. closet, clasp, cleaner, climate
30. knit, knock, knuckle, knave
31. Indian, initiate, invent, internal
32. violent, vial, vitiate, vineyard
33. open, opinion, opus, opposite

7

Telling Her Family's Stories

by Lisa Yount

AP/Wide World Photos

1 All writers draw inspiration from their own experience to some extent when they create their work, but Alice Walker has done so, perhaps, more than most.

2 Much of Alice's early life was not happy. She was the youngest of eight children in a poor black family in Georgia. Her mother was a cook and a maid, her father was a sharecropper. As the only girl still living at home, Alice herself had plenty of household work to do.

3 Not surprisingly, Alice was often lonely as she grew up. "Books became my world because the world I was in was very hard," she recalls. "Sometimes I thought I'd gotten into the family by mistake." She read, too, as a way of learning about the world beyond the small town where she

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lived, and she began writing poetry when she was only eight years old.

4 Alice's will and her father's often seemed to collide. Alice's father was not interested in her ideas and seemed to have difficulty giving her the affection she needed.

5 Even so, Alice's father taught her important lessons. Once, young Alice accidentally broke a fruit jar. Her father asked her sternly whether she had broken the jar. Alice knew that if she admitted doing so, she might be punished, because jars were hard to replace.

6 "Yes, I broke the jar," Alice said. Somehow she was sure it was what her father wanted her to say. Instead of punishing her, her father hugged her. "He taught me not to bother telling lies because the listener might be delighted with the truth," Alice says now.

7 By his example, Alice's father also taught her to stand up for her rights as a citizen. Years before Alice was born, he was one of the first black men to vote in the town where he lived. He worked to get other blacks to vote, too. In that time and place, such activity took great courage, for blacks often risked their lives by voting. As an adult, Alice followed her father's example by helping blacks register to vote in Mississippi.

8 In her family, only Alice's mother seemed to understand her. While Alice was in high school, her mother gave her three gifts: a sewing machine, a suitcase, and a typewriter. Some parents could give such gifts without a second thought. Alice knew, though, that her mother made less than twenty dollars a week. So each present represented months of work.

9 Furthermore, each gift carried an unspoken message to Alice. The sewing machine told her to be independent. The suitcase told her to travel. The typewriter told her to keep writing. To Alice, these messages meant even more than the gifts themselves.

10 A few of Alice's teachers helped her, too. They lent her books. They "saved me from feeling alone; from worrying that the world I was stretching to find might not even exist."

11 Today, Alice Walker has reached the wider world she was stretching to find. Now, in her writing, she can reach back to build a bridge between that world and the world she came from.

12 Alice sometimes says she is telling her mother's stories. "I love her too much to let her go without praise. She gave me the freedom to tell stories, and I am saying thank you." In her stories, too, Alice can show the kind of man she is sure her father once was as well as the unhappy man she remembers. She can talk to him in her poems as she never could in person.

13 Alice's writing reflects the people she grew up with, too. Many of her novels, poems, and essays are about people like those she knew as a child. She tells about their hard and sometimes unhappy times. She is not afraid to describe their flaws, but she also tells about the strength she sees in them.

14 Alice Walker's best-known novel, *The Color Purple,* won the Pulitzer Prize in 1983. She was the first black woman novelist to receive this prestigious honor. Alice explains that Celie, the novel's main character, speaks in "the voice of my step-grandmother, Rachel. I tried very hard to record her voice for America because America doesn't really hear Rachel's voice."

15 In her realistic recording of the voices and lives of Celie and the novel's other characters, Alice Walker is true to her family and the other people she knew as a child. In what her characters say—in their fears and their hopes—she is true to all of us.

16 "You ast yourself one question, it lead to fifteen," Celie's ex-husband says. "I start to wonder why us need love. Why us suffer. Why us black. Why us men and women. Where do children really come from. It didn't take long to realize I didn't hardly know nothing. And that if you ast yourself why you black or a man or a woman or a bush it don't mean nothing if you don't ast why you here, period."

17 "So what you think?" Celie asks him.

18 "I think us here to wonder, myself. To wonder. To ast. And that in wondering bout the big things and asting bout the big things, you learn about the little ones, almost by accident. But you never know nothing more about the big things than you start out with. The more I wonder . . . the more I love."

HOW WELL DID YOU READ?

Did you read carefully?

1. **The story stated that Alice read**
   - **A** in order to anger her father who could not read
   - **B** in order to absorb herself in a more pleasant world than her own
   - **C** because she often had nothing else to do with her time

2. **Alice's father influenced her to**
   - **A** write poems and novels and attend college
   - **B** leave Georgia and travel to the North
   - **C** tell the truth and work for civil rights

3. **Alice's teachers helped her by**
   - **A** lending her books
   - **B** introducing her to a publisher
   - **C** giving her money for paper

4. **According to the story, the characters in Alice's works are people who**
   - **A** see good even in the most terrible situation
   - **B** refuse to change their ways of doing things
   - **C** have great strengths as well as weaknesses

Did you see the main idea?

5. **Her mother's presents were important to Alice mainly because**
   - **A** her mother worked so hard to pay for them
   - **B** they showed that her mother understood her
   - **C** Alice really needed the gifts she received

6. **Alice feels that in writing about her mother and father and those she grew up with, she is repaying them for**
   - **A** what she learned from them
   - **B** the favors they did for her
   - **C** the money they lent her

7. **In the quote from *The Color Purple*, Celie's ex-husband says he believes people are here mainly to**
   - **A** love other people and care for them
   - **B** wonder and ask about life
   - **C** answer life's important questions

Did you draw the right conclusions?

8. **The sewing machine gave Alice the message "be independent" because it gave her a way**
   - **A** to do something by and for herself
   - **B** to help support the family
   - **C** to earn money for her education

9. **Alice probably recorded Rachel's voice so carefully because she thought**
   - **A** people should understand Rachel's natural style of speaking
   - **B** readers would find Rachel very interesting
   - **C** Americans should understand the feelings of people like Rachel

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. uplifting ideas or thoughts *(1)*
2. person who works on someone else's farm and is paid part of the value of the crop *(2)*
3. determination; mental strength *(4)*
4. crash into each other *(4)*
5. faults *(13)*
6. long work of fiction *(14)*
7. highly respected *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

8. jar *(5)*
- **A** harsh grating sound
- **B** wide-mouthed container
- **C** sudden shake

9. register *(7)*
- **A** make an impression
- **B** match exactly
- **C** sign up formally

10. present *(8)*
- **A** gift
- **B** time of now
- **C** tense of a verb

11. stretching *(10)*
- **A** reaching out
- **B** pulling tight
- **C** enlarging by force

12. bridge *(11)*
- **A** roadway over a river
- **B** card game
- **C** means of connection

C. păn – pā/n
măn – mē/n
cŏst – cō/st

When a one-syllable word ends with a consonant, the vowel is usually short. When two vowels come together in a word, often the first vowel is long and the second is silent. Some short-vowel words can be changed to long-vowel words by adding another vowel.

Directions: These short-vowel words have been made into long-vowel words. Write both words and mark all the vowels—long (¯), short (˘), or silent (/).

13. pal – pail
14. bat – bait
15. met – meat
16. sat – seat
17. mad – maid
18. rod – road
19. got – goat

D. ta / ble un / cle mar / ble

If a word ends in *le,* the consonant just before the *le* usually begins the last **syllable.** Words that end in *ckle* are exceptions. The *k* goes with the first syllable.

pick / le

Directions: Write each word and draw a line between the syllables.

20. hustle
21. sickle
22. purple
23. dwindle
24. thistle
25. pebble
26. chuckle

E. *mis* = wrong; badly
dis = not; opposite of

The **prefixes** *mis-* and *dis-* can be added to many words you know to change their meanings.

mis + behave = misbehave (act badly)
dis + honest = dishonest (not honest)

Directions: Find the word in column II that matches each meaning in column I. Write the word.

I	II
27. count wrongly	mispronounce
28. not like	misfire
29. give wrong information	disorder
30. not loyal	miscount
31. fire badly	dislike
32. opposite of order	disloyal
33. pronounce wrongly	misinform

8

IN WAR AND PEACE MAN HAS FOUND

Surprises in Ice

by Leverett Richards

1 Everyone knows that ice shatters like window glass at the slightest tap. But ice can also bend like rubber. It can be almost as hard as steel and as strong as concrete. Ice can be used for armor in time of war. It can be used for roads or landing strips, and even for the construction of ocean vessels.

2 In temperatures of twenty-five degrees below zero Fahrenheit and colder, ice becomes strong enough to stop a bullet or a bomb. During the many wars between the Finns and Russians, blocks of ice were used like sandbags or armor plating to protect troops and gun crews from enemy fire. During World War II both the Russians and the Germans learned that the biggest bomb or artillery shell would make only a shallow dent in ice. Doubling the size of the bomb made little difference in the size of the crater it made.

3 When the Germans laid siege to Leningrad, they cut all the roads and railroads. This left the city almost surrounded by the waters of the sea and river that border it. But soon the sea froze over, and the Russians simply used the ice for their highway. Over it they drove trucks full of food and ammunition for the city's occupants. The Germans dropped bombs and shells on the ice highway. But the bombs made only shallow holes. They could not break through the ice. They could not cut the highway or stop the trucks.

4 The Eskimos learned to travel on ice

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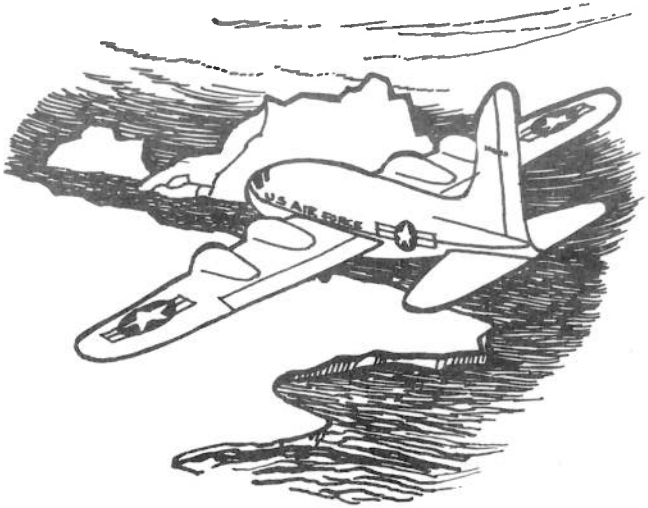
long ago. Years ago their primary mode of transportation was sleds drawn by dogs, rather than the snowmobiles of today. When they had to leave the ice of the sea or the lakes and travel overland, they put ice on the runners of their sleds. This was because at very cold temperatures snow is not slippery. It is like sand. The sharp, hard snow crystals grated against the sled runners so that the dogs could not pull the load. So the Eskimo stopped and melted snow to make hot water. Then he covered his sled runners with water, which formed into a layer of hard, slippery ice.

5 Ice has also been used successfully as a building material. The idea came from the Eskimos, who freeze moss into ice blocks to prevent them from melting too easily. During World War II the Allies tried mixing wood fiber with water and freezing it. The wood fiber formed an insulating blanket which kept the ice from melting. This reinforced ice was so strong that a plank of it an inch thick would support the weight of six men. A four-inch sheet would stop a pistol or rifle bullet. The Allies called this new ice mixture pykrete, after its British inventor, Geoffrey Pyke.

6 During the early days of World War II, German submarines were sinking Allied supply ships faster than we could build them, and England needed supplies desperately. The Allies wanted to build a ship that could not be sunk by torpedoes or bombs or dented by the big guns of the German battleships. Such a ship could be built of pykrete. Like an iceberg, it would not roll or toss, even in the worst of storms. The highest waves would have no effect on it. A refrigeration plant would keep the forty-foot-thick ice walls frozen solid. Any damage from bombs could be quickly fixed by spraying the holes with water and letting it freeze.

7 To test the idea, the Allies built a small pykrete ship, sixty feet long and thirty feet wide. For months the odd ice ship cruised about in water temperatures of up to sixty degrees without melting. The pykrete ship was a success, but the war ended before any more could be built.

8 Nature's own aircraft carriers made of ice were used by U.S. aircraft. Landings were made on an ice island in the Arctic Ocean to set up a scientific station. However, operating an airport that rose and fell with the tide and moved out to sea three or four feet per day involved a lot of problems. No one knew at first how much ice was required to support the weight of twenty-ton or hundred-ton airliners, for the salt in seawater causes it to freeze in an unusual way. After it has frozen into ice four or five feet thick, the salt drains out of the top layer of ice, leaving it filled with tiny holes. Because it is so porous, sea ice is



not as strong as freshwater ice. To support the weight of a heavy aircraft, thicker ice is needed on seawater than on fresh water. So pilots had to judge the ice thickness very carefully before landing and operating aircraft on hard sea ice. Furthermore, the ice was fickle. It changed with each change in the weather. Ice that would support a heavy airplane in the morning might not even support a truck a few hours later.

9 So far, the possibilities of ice are not fully known. Its uses have been explored very little. Except in time of war, few people besides Eskimos live in arctic regions. But perhaps someday the world's warm lands will become overcrowded. People may have to live nearer to the poles. Then they will probably find even more surprising uses for that fascinating material, ice.

HOW WELL DID YOU READ?

What did you learn?

1. **During World War II it was found that ice could**
   - **A** be shattered by double-sized bombs
   - **B** stop a bullet or a bomb
   - **C** be used as a substitute for ammunition

2. **The ice highway used during the siege of Leningrad was**
   - **A** made of heavy ice blocks
   - **B** frozen snow
   - **C** the frozen sea

3. **At very cold temperatures snow is**
   - **A** extremely slippery
   - **B** coarse and sandy
   - **C** warm to the touch

4. **Wood fiber was used in pykrete because it made**
   - **A** a hard surface layer
   - **B** an insulating blanket
   - **C** a thicker piece of ice

How carefully did you read?

5. **The idea for pykrete came from**
   - **A** a British inventor
   - **B** the Russians
   - **C** the Eskimos

Did you understand what you read?

6. **The small pykrete ship was probably built to**
   - **A** transport supplies secretly to England
   - **B** serve as a scale model for larger pykrete ships
   - **C** test whether pykrete was strong

7. **The pykrete ship could be damaged by**
   - **A** the big guns of German battleships
   - **B** severe storms
   - **C** warm temperatures

8. **Sea ice fills up with tiny holes when**
   - **A** rough waves eat away at it
   - **B** air and water temperatures reach extremes
   - **C** salt trapped in the ice drains away

What does the writer think?

9. **The writer thinks that the uses of ice have**
   - **A** just begun to be discovered
   - **B** been fully explored
   - **C** been proved to be limited

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. small hollow made by a blow *(2)*
2. hole; bowl-shaped pit *(2)*
3. ground or rubbed against *(4)*
4. strengthened *(5)*
5. traveled; sailed *(7)*
6. full of tiny holes *(8)*
7. changeable *(8)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

8. blocks *(2)*
- **A** groups of city buildings
- **B** children's toys
- **C** solid pieces of material

9. shell *(2)*
- **A** hard outer covering of animal or plant
- **B** long, narrow racing boat
- **C** explosive missile

10. runners *(4)*
- **A** messengers
- **B** long bars on which a sled slides
- **C** twining plants

11. plant *(6)*
- **A** green growing thing
- **B** equipment for a mechanical operation
- **C** factory

12. poles *(9)*
- **A** long thin rods
- **B** regions at the ends of the earth's axis
- **C** opposite ends of a magnet

C. Words are arranged in **alphabetical order** in the dictionary.

all
big
comet

Directions: Read the words in each line. One of them is not in alphabetical order. Write the word that is not in order.

13. dress, part, round, file
14. next, class, dash, object
15. azure, finished, middle, edge
16. folly, game, try, floor
17. hornet, listen, past, driver
18. choose, front, apt, sideways
19. breathe, disc, rotate, cattle

D. When words begin with the same letter, you need to look at the second letter to see whether they are in **alphabetical order.**

rh yme
ri ver
ro bber

Directions: Read the words in each line. Write the word that should come last in alphabetical order.

20. orbit, often, otter, owl
21. avoid, aground, angry, appear
22. paper, prefer, pounce, pink
23. starch, saddle, serve, shall
24. rice, rope, reveal, raider
25. unhappy, upper, ugly, useful
26. try, toy, terrible, tub

E. When the first two letters of words are alike, you need to look at the third letter to put the words in **alphabetical order.**

tal king
tap e
tas k

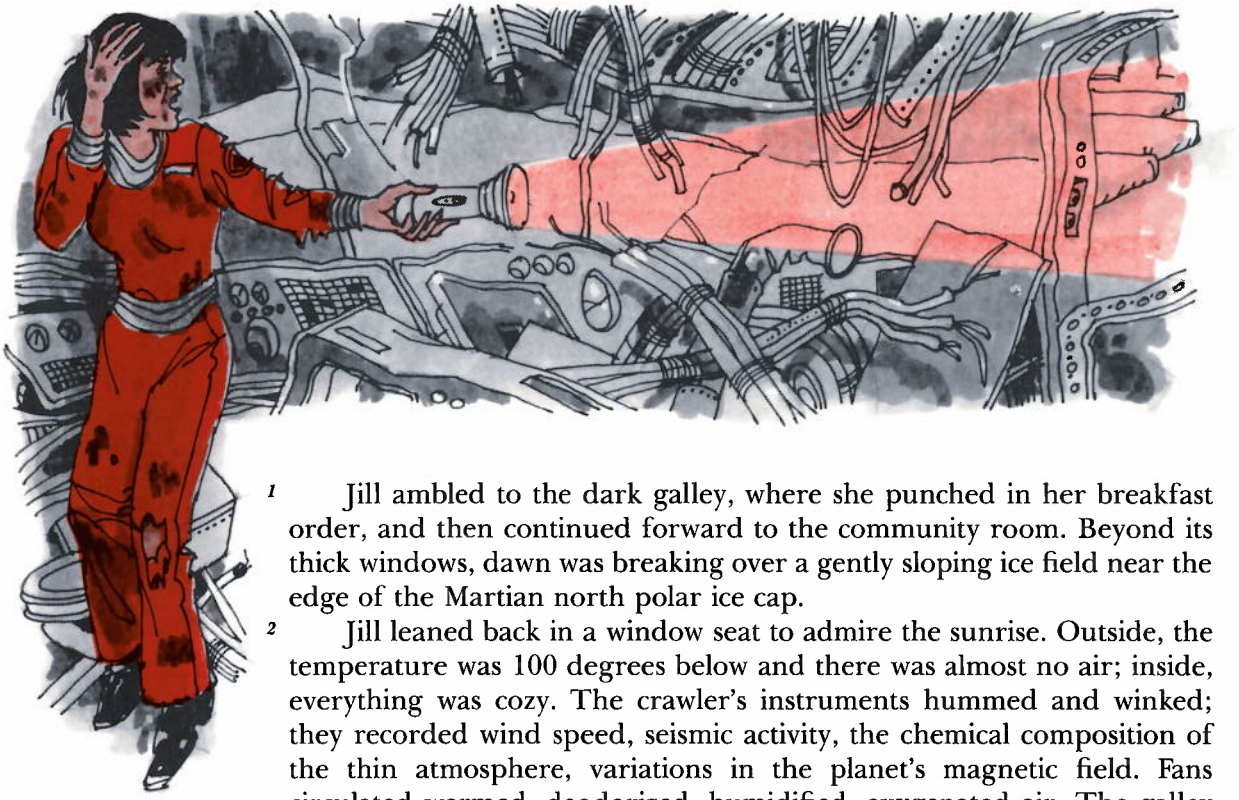
Directions: Read the words in each line. Write the word that should come first in alphabetical order.

27. handle, hamper, halyard, hat
28. ice, icon, icicle, icy
29. junkyard, jumping, judge, jubilee
30. needle, nesting, nearly, nebulous
31. marine, make, map, mast
32. knapsack, knowing, knell, knight
33. lettuce, lemon, leisure, ledger

9

by Carolyn Gloeckner

At Sunrise, On Mars



1 Jill ambled to the dark galley, where she punched in her breakfast order, and then continued forward to the community room. Beyond its thick windows, dawn was breaking over a gently sloping ice field near the edge of the Martian north polar ice cap.

2 Jill leaned back in a window seat to admire the sunrise. Outside, the temperature was 100 degrees below and there was almost no air; inside, everything was cozy. The crawler's instruments hummed and winked; they recorded wind speed, seismic activity, the chemical composition of the thin atmosphere, variations in the planet's magnetic field. Fans circulated warmed, deodorized, humidified, oxygenated air. The galley controls chimed, indicating that breakfast was ready.

3 Still gazing out the window, Jill noticed movement on the ice field. A huge hole had suddenly appeared in the ice and was growing in the crawler's direction even as she watched. She leaped to her feet and hit the emergency switch. The siren whooped as the crawler teetered and then began to slide. Jill wedged herself between two seats as the terrifying avalanche began.

4 When it was over, the crawler was filled with acrid smoke. Sparks flickered all around. Jill took stock of herself: no bones broken, although she could taste blood and she ached all over.

5 "Is everyone all right back there?" she shouted but received no reply.

6 She felt her way to a storage locker and fumbled through its contents until she found a flashlight. In the galley area, floor and ceiling met

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in a twist of steel and cables; the crawler's rear section, containing the team's sleeping quarters and the other eight scientists, had been separated from the front section.

7 At first numb and incredulous, Jill quickly realized that she must get help. She would switch to the emergency power system and send a Mayday to the nearest crawler, a day or so away.

8 She played the flashlight beam over the communications console, and gasped. It was smashed, smoking—beyond repair.

9 Then she became aware of another sound: whistling and hissing that told her the crawler's air was escaping. She went to an equipment locker and zipped herself into a pressure suit; as soon as her helmet was secure, she turned on the air tank. There were several dozen tanks in the locker, containing enough air for one person for several days. When the power pack that warmed her suit ran down, she would have eight others to use up. And then what?

10 Jill went to the airlock and kicked with all her might at the forward hatch. It fell outward.

11 Blinking in surprise, she stepped into the sunlit Martian morning and saw she was at the bottom of a hole perhaps 200 meters wide and half as deep. Most of the crawler was covered with ice, a slab big as a small spacecraft resting on top. Somewhere under the tons of ice behind her, she thought, the rear part of the crawler lay crushed, its occupants dead or dying.

12 She studied the steep walls of her prison and saw that escape was impossible. A large, lens-shaped cavity on the far wall caught her eye. So that was it—there were caves under the ice! The ice had collapsed into one of them, resulting in the pit.

13 Yesterday, Jack Chen had used a small explosive charge to start a drillhole in the ice. Maybe the vibration had weakened the ice, causing the roof of the cave to give way.

14 She climbed over slabs of ice to examine the elliptical cavity more closely. What she found astonished her. Set into the walls of the cavity were dozens of copper-colored disks; each was incised with spirals and circles. Pulling one of the disks from its icy matrix, she discovered that it was scarcely bigger than a thumbnail, with fine silvery wires sprouting from the side that had been stuck to the ice.

15 Perhaps the ice caves—this little one and the huge one that had collapsed—were artificial. Perhaps the disks had been used to preserve the form of the caves, even to create them in the first place! How long had the caverns been here on Mars—centuries, millennia? What had been their purpose? Were they storage rooms, homes, tombs? Had Mars once been inhabited, or were the cave-makers from another planet, another solar system, another galaxy?

16 This surely was the most remarkable discovery of the expedition—or of any expedition, ever. Jill laughed at the absurdity of it. She had just stumbled onto something that might alter the course of human history, and she might not live to tell about it.

17 A buzz sounded near her right ear. Automatically she thumbed the switch on her suit communicator.

18 "Jill? Dr. Wilder?"

19 "Yes, I'm here, in a hole in the ice!"

20 "We see you. We've gotten in touch with Marsbase and they've rerouted a crawler to rescue us."

21 She knew that voice! "Is this Jack Chen?"

22 "Yes!"

23 "I thought you were dead! I thought the back compartment had been crushed under the ice!"

24 "Oh, no, we're all fine. The back part is up here, unharmed. We've finally sorted ourselves out—we thought you were with us until a minute ago."

25 Far above her, figures dressed in bright blue pressure suits waved.

26 "Shall we try to pull you up?"

27 She waved back. "Not just yet. Instead, why don't you come down? I can promise you a surprise, something to remember all your lives!"

HOW WELL DID YOU READ?

Do you remember the details?

1. **The hole into which the crawler fell was**
   - **A** 100 meters deep
   - **B** 200 meters deep
   - **C** 300 meters deep

2. **Jill wanted to use the crawler's communications system to**
   - **A** contact the other team members
   - **B** signal another crawler for help
   - **C** get an evaluation of the damage

3. **Jill could not escape from the hole because**
   - **A** she had been too badly hurt to walk far
   - **B** her air supply wasn't sufficient
   - **C** its walls were too steep to climb

Can you draw the right conclusions?

4. **In paragraph 2 the author describes the technology of the crawler to**
   - **A** emphasize its importance to the survival of its passengers
   - **B** indicate the importance of caution in its operation
   - **C** underscore Jill's technological knowledge and her importance to the team

5. **Jill's team was on the Martian ice cap to**
   - **A** locate some mysterious caverns
   - **B** study and explore the ice cap
   - **C** look for valuable minerals

6. **Jill was surprised when the forward hatch fell outward probably because she had**
   - **A** assumed the crawler was buried in ice, thereby preventing the hatch from opening
   - **B** thought the emergency system would have permanently sealed the hatch
   - **C** underestimated the extent of the structural damage to the crawler

7. **At the end of the story, Jill invited the other scientists to join her at the bottom of the pit because she wanted to**
   - **A** have their help in repairing the damage to the communications system
   - **B** share with them the amazing discovery she had made
   - **C** discuss with them the fall of the crawler and the extent of the damage

8. **Jill can best be described as**
   - **A** cautious
   - **B** foolhardy
   - **C** courageous

Did you understand the order of events?

9. **After Jill found the flashlight, she first used it**
   - **A** to look for leaks in the crawler's walls
   - **B** to find a pressure suit and air tank
   - **C** to survey the damage to the galley area

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. biting; irritating *(4)*
2. unbelieving *(7)*
3. oval shaped *(14)*
4. engraved; carved *(14)*
5. material in which something is embedded *(14)*
6. thousands of years *(15)*
7. unreasonableness *(16)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

8. galley *(1)*
- **A** kitchen of a ship
- **B** large medieval sailing ship
- **C** oblong tray for holding printer's type

9. breaking *(1)*
- **A** failing in health and strength
- **B** fracturing; separating into parts
- **C** coming into being

10. composition *(2)*
- **A** artistic arrangement
- **B** intellectual creation
- **C** general makeup

11. played *(8)*
- **A** engaged in a game or sport
- **B** moved freely
- **C** performed music

12. charge *(13)*
- **A** accumulation of force
- **B** thrill; kick
- **C** accusation; indictment

C. When a word has one consonant between two vowels, it is usually divided into **syllables** this way:

pa / per
va / cant

The consonant goes with the letters after it.

Directions: Write each word. Draw a line between the syllables.

13. meter
14. total
15. razor
16. zero
17. sober
18. halo
19. final

D. you will = you'll
I have = I've

Sometimes we put two words together and use an apostrophe (') to show where letters have been dropped. The new word is a **contraction.**

Directions: Decide which letters have been left out of each contraction. Write the missing letters.

20. it's
21. couldn't
22. isn't
23. I've
24. she's
25. they've
26. you're

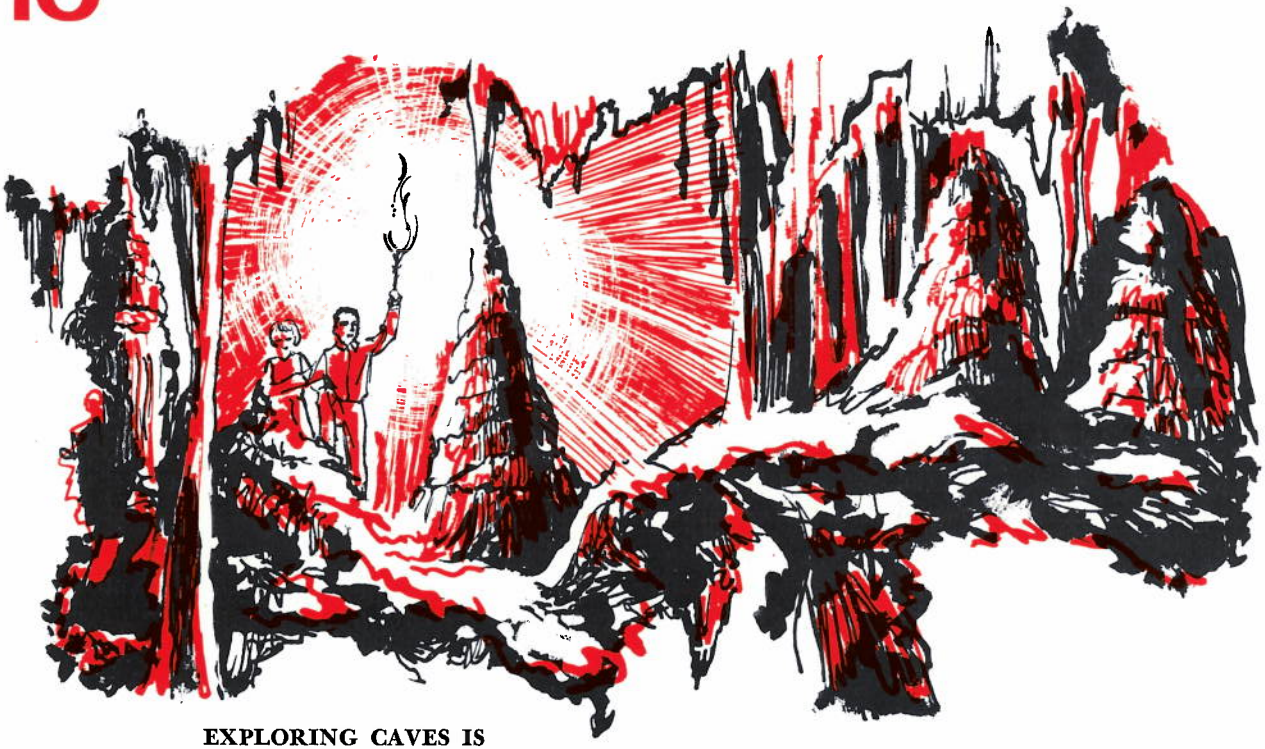
E. cook + book = cookbook

A **compound word** is made up of two or more words that combine to have one meaning. *Cookbook* is a compound word because each of its parts is a word. *Cookies* is not a compound word because one of its parts is not a word.

Directions: There is one compound word in each sentence. Write the compound word and draw a line between the two words in it.

27. May I borrow your newspaper?
28. He is an outstanding young man.
29. The armchair is badly broken.
30. Have you overlooked an essential fact?
31. Look for the dishcloth in the drawer.
32. The spearhead is probably flint.
33. He opened up the motor as the speedboat took the turn.

10



EXPLORING CAVES IS

A Hole-in-the-Ground Hobby

by Russell H. Gurnee

1 Five hundred years ago a man now known as Lost John was crushed to death by a boulder while he was scraping Epsom salts from the wall of a cave. John was one of the earliest *spelunkers* and one of the unluckiest. Spelunkers are people with a strange hobby —caves. Spelunkers crawl into a hole in the ground for just one reason: they enjoy it. They are driven by curiosity to see what nobody before them has ever seen.

2 Spelunking has been called "mountain climbing upside down in the dark." However, this description is not entirely accurate. Mountain climbers know where they are going. They climb a mountain because it is there. Spelunkers, on the other hand, don't know what is there. All they see when they enter a wild cave is a hole in the surface of the earth—a very dark hole. Once inside they may find it runs only a few hundred feet or, like one cave in Switzerland, more than thirty-nine miles. They may find barren, subwaylike tunnels or strange and beautiful limestone formations.

3 Some spelunkers have become famous for their discoveries. Several years ago Norbert Casteret, a Frenchman, was exploring a cave that had a rapidly flowing underground river.

Based on "Hole-in-the-Ground Hobby" by Russell H. Gurnee.

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He followed the river until it plunged under a cave wall and disappeared. Wearing a bathing suit and a rubber cap, under which he stowed matches and a candle, he dived into the river. He surfaced on the other side of the cave wall, in a huge chamber. There he saw a sight that had lain undisturbed for twenty thousand years. Scattered on the floor were several clay figures of animals. Their bodies were full of lance holes. Probably they had been part of a primitive hunting ritual.

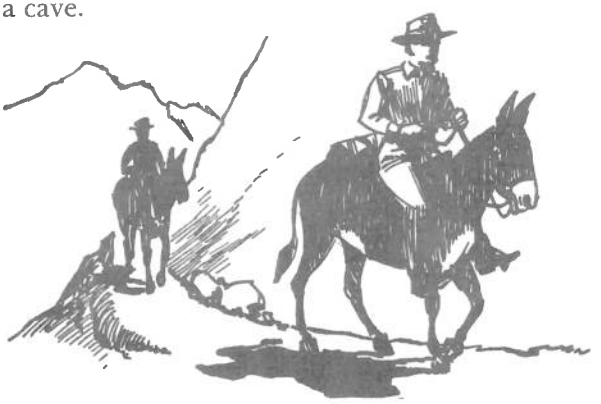
4 Undoubtedly the most famous of American spelunkers was Floyd Collins. He explored Crystal Cave in Kentucky—part of the longest cave system in the world. Crystal Cave is thirty-two miles long and is now known to connect with another cave system, Mammoth Cave. Collins once crawled into remote portions of Crystal Cave with a kerosene lantern as his only source of light. The lantern broke, and he was immersed in inky, silent blackness. He tore his clothes to shreds. Then he soaked them in kerosene and used them as torches. It took him about forty hours to get out.

5 On another occasion Collins, alone again, explored a 125-foot-deep pit inside the cave. He managed to lower himself to about fifteen feet from the bottom, then jumped the rest of the way. Continuing on, he discovered new chambers and passageways that would double the known size of the cave.

6 When he returned to the pit, he had no equipment to help him up the sheer fifteen-foot wall. He was forced to collect rocks and stones and pile them up in order to climb out.

7 Collins ended up the same way that Lost John did. But he got a lot more publicity. More headlines were devoted to him in 1925 than to Babe Ruth, Jack Dempsey, Helen Wills, and Glenna Collett. Collins died, say spelunkers, because he broke too many rules. Most important is the rule against exploring caves alone. Traveling alone is just as bad for a spelunker as it is for a long-distance swimmer.

8 My wife and I became spelunkers almost by accident. We were driving down the Pan-American Highway to Mexico City when I noticed several black openings up in the jagged mountains near the road. I stopped, asked what they were, and learned that they were a network of caverns. I was told that we could explore them by renting a guide and a pair of burros. We were soon climbing slowly up the steep trail that led to the entrance of a cave.



9 When we reached the top, a large opening appeared under an overhanging cliff. Inside was a smaller hole covered by a wooden door. Taking a gasoline lantern in one hand, the guide opened the door. We followed him down the slick cement steps. Grotesque shapes moved on the walls as his lamp swung back and forth at each step.

10 This was a limestone cave, formed hundreds of thousands of years ago by the slow dripping of water through the crevices of the rock. After a hollow had been formed, the water continued to drip, leaving small deposits of calcium carbonate on the ceiling and floor. Over the centuries the deposits grew into strange formations and huge columns, sometimes sealing up whole passageways.

11 The guide pointed out formations that looked like horses, hands, and strips of bacon. The inside of the cave was unlike anything we had ever seen above ground. Walking through a cave as we did might not be much of a challenge for an experienced spelunker,

but for us it was the beginning of a fascinating new hobby.

12 When we left the cave about an hour later, we saw a sign mentioning the National Speleological Society. Our interest awakened, we noted the address and wrote for further information.

13 The reply informed us that there were "Grottoes," local chapters of the society, all over the United States. We joined one that was near our home. Soon we were making our first trip through a wild, uncharted cave. That was twenty-four years ago. Since then I have explored caves in Europe, Central and South America, and all over the United States.

HOW WELL DID YOU READ?

How is the story told?

1. **The author first gains the reader's attention by describing**
   - **A** his introduction to cave exploration
   - **B** some of the most famous caves
   - **C** what spelunking is

How are these things alike or different?

2. **A quality found in all spelunkers is**
   - **A** practicality
   - **B** curiosity
   - **C** foresight

3. **The chief difference between spelunking and mountain climbing is that**
   - **A** spelunking is usually done in the dark
   - **B** there is less danger in spelunking
   - **C** spelunkers have less idea what they will find

How careful was your reading?

4. **Casteret is famous for discovering**
   - **A** a 125-foot pit
   - **B** an underground river
   - **C** clay figures

5. **The author's interest in the National Speleological Society began**
   - **A** in his boyhood
   - **B** after his first cave trip
   - **C** shortly before the article was written

Can you draw the right conclusions?

6. **Collins' escapes from Crystal Cave showed his**
   - **A** willingness to learn from others
   - **B** complete familiarity with the cave
   - **C** ability to make plans on short notice

7. **Collins' greatest handicap was his**
   - **A** interest in publicity
   - **B** carelessness
   - **C** inexperience

8. **The length of a cave can best be determined by**
   - **A** exploring it
   - **B** measuring the size of its mouth
   - **C** knowing its chemical composition

9. **The author considers spelunking to be**
   - **A** a useful profession
   - **B** an interesting hobby
   - **C** a precise science

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. correct; exact *(2)*
2. empty; lacking *(2)*
3. crude; uncivilized *(3)*
4. far off; hidden away *(4)*
5. plunged; dipped *(4)*
6. slippery; glossy *(9)*
7. strange; fantastic-looking *(9)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

8. figures *(3)*
- **A** shapes; forms
- **B** drawings
- **C** numbers

9. pit *(5)*
- **A** place for the orchestra
- **B** hole in the ground
- **C** seed-containing stone

10. sheer *(6)*
- **A** very steep
- **B** transparent
- **C** pure

11. rule *(7)*
- **A** habit; custom
- **B** reign; control
- **C** law; regulation

12. bad *(7)*
- **A** wicked
- **B** disagreeable
- **C** harmful

C. When two consonants come between two vowels in the middle of a word, the first consonant usually goes with the first **syllable** and the second with the next syllable.

en / ter
har / vest

Directions: Write each word. Draw a line between the syllables.

13. differ
14. garbage
15. pasture
16. cancer
17. barley
18. matter
19. follow

D. The **suffix** *-ly* means "like" or "in a certain way." It can be added to many words you know.

slow + *ly* = slowly
mother + *ly* = motherly

Directions: Add *-ly* to each word below to change its meaning. Write the new word you make.

20. quick
21. sad
22. quiet
23. thorough
24. pure
25. clear
26. hoarse

E. re + **write** + ing = rewriting
spell + ed = spelled

Many words are built on **base words** that you know. The base word is your key to understanding the longer word.

Directions: The words in each line are built on the same base word. Find the base word and write it.

27. closed, foreclose, closeness
28. beside, sideways, inside
29. roomy, bedroom, roomful
30. makeup, remake, maker
31. pressure, pressed, depress
32. hopeful, hopeless, hopes
33. unlawful, lawless, outlawed

by André Classe

The Whistle Language of La Gomera

1 The natives of La Gomera can carry on long-distance conversations by whistling. For ordinary conversation they speak Spanish. But when they need to speak over a distance, and ordinary speech is impossible, they use the *silbo*. This is the name of a whistled form of speech.

2 La Gomera is one of the smaller Canary Islands. It is very mountainous, for it was once a volcano. The island is almost circular in shape, with a high peak in the center. From this peak, deep, narrow gorges, separated by rocky ridges, run down to the coast like the spokes of a wheel. So in spite of the island's small size, walking from one place to another may be a slow and difficult job. That is why the silbo is so useful to the natives. A message can easily be whistled over a couple of miles, while to travel that same distance on foot might take an hour.

3 A good whistler, or *silbador,* can be heard and understood five miles away. His whistling can be heard even farther away when conditions are favorable—when there is little or no wind. I was informed that the record is about nine miles. Anyone who has heard a first-class silbador will agree that this figure is quite possible.

4 Not only does a whistle carry farther than a shout, but it is easier

Adapted from "Whistle Language of the Canary Islanders" by Andre Classe, UNESCO Courier, *November 1957 issue.*

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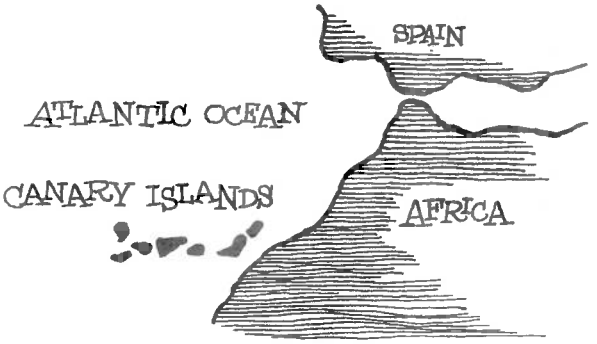


to understand. When a person shouts, he cannot pronounce his words well. But in whistling, this problem does not exist. If a whistle is heard at all, it will be heard clearly.

5 Many methods of whistling are used at La Gomera. The only one never used is the common lip whistle, because it is not loud enough. Usually a silbador inserts one or two fingers, or a bent knuckle, into his mouth. He keeps the front of his tongue still, and his lips spread and stiff. With some practice, this method of whistling can make a tone of astonishing loudness and purity, with great carrying power and a range of about three octaves. No one silbador ever uses the entire range.

6 Usually a whistler's range is no more than two octaves. In the eastern part of the island, most silbadors whistle in the upper range. On other parts of the island, they whistle in the lower range.

7 Some whistlers do not use their fingers at all. Instead, they form a groove in the front part of the tongue which touches the upper front teeth. They then use their hands to form a kind of megaphone.

8 There is nothing very unusual about these methods of whistling. Anyone with a good set of teeth can learn in a couple of days to produce a noise that sounds much like a steam whistle. The really remarkable thing is that this simple noise can be used as a language.

9 A whistle is a pure and practically unchanging tone. It varies only in pitch and length. It does not have all the variations of tone that are so important to spoken speech. To achieve variations, the silbador tries to perform the same movements with his teeth, mouth, tongue, and throat that he would use if he were actually talking. Of course he cannot move his lips during the whistling, so there is some difference. However, it is close enough. Anything that can be said in Spanish can be whistled and understood perfectly.

10 A simple example will show how the whistle language works. If we whistle a few notes—do, mi, so—we notice that as the pitch goes up, the tongue rises in the mouth. Suppose we try to pronounce the vowel sound *ee* (as in *beet*). The free part of the tongue rises, and the pitch of our whistle will be high. Suppose we try to pronounce the sound *a* (as in *father*). The tongue goes down, and the pitch of the whistle will be much lower than in the first case. Thus, in whistling vowels, pitch takes the place of the tone of the spoken vowel.

11 The whistling of consonants, such as *t*, is more complex. It involves both the pitch and the duration of the whistled tone. Some consonants sound very much like others when they are whistled, but this seldom causes any trouble. When doubtful words are used in a sentence, their meanings become clear.

12 The silbo may sound very different from ordinary speech, but it has many of the characteristics of a spoken word. For example, each silbador has his own individual style of whistling, just as he has his own way of speaking. You can recognize him by his whistling

just as you would recognize him by the way he spoke.

13 For the natives of La Gomera, using the silbo is perfectly natural. It is on record that on Christmas Day, 1862, the mayor of San Sebastián (the capital of La Gomera) locked the doors of the church to keep the shepherds out because they had ignored his order not to whistle the words of the psalms during the church service.

14 The silbo can be used to say everything—anything that is speakable in Spanish is also "whistlable." This is true partly because the Spanish language has such a simple sound system. The silbo would not work nearly so well with English.

HOW WELL DID YOU READ?

What was the author's purpose?

1. **The author wrote this article in order to**
   - **A** preserve a fast-disappearing custom
   - **B** create interest in the island of La Gomera
   - **C** describe an unusual means of communicating

How carefully did you read?

2. **The whistled language is useful to La Gomera natives because of the island's**
   - **A** surface
   - **B** size
   - **C** location

3. **Compared with shouting, whistling is**
   - **A** more easily understandable
   - **B** able to carry further
   - **C** both **A** and **B**

4. **In the silbo, vowels are sounded by**
   - **A** varying the volume from soft to loud
   - **B** changing the speed of whistling
   - **C** making the whistle higher or lower

5. **Consonants that sound alike can be told apart when**
   - **A** the entire sentence has been heard
   - **B** the silbador gestures with his hands
   - **C** they are whistled loud enough

6. **Silbadors in the eastern part of the island whistle in the upper range**
   - **A** because of an old custom
   - **B** because of a different method of whistling
   - **C** for a reason not given

Can you draw the right conclusions?

7. **Natives of La Gomera would not need the whistle language if they had**
   - **A** phonographs
   - **B** megaphones
   - **C** telephones

8. **For a loud, clear whistle one needs the**
   - **A** hands and lips
   - **B** lips and tongue
   - **C** teeth and tongue

9. **To be easily whistlable, a language should have**
   - **A** easy grammar
   - **B** few vowels
   - **C** simple sounds

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. seashore *(2)*
2. puts in *(5)*
3. long narrow hollow *(7)*
4. device for increasing loudness *(7)*
5. unmixed; clear *(9)*
6. time a thing continues *(11)*
7. paid no attention to *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Then choose the correct meaning and write the letter that stands before it.

8. gorges *(2)*
- **A** large meals
- **B** feelings of anger
- **C** long valleys

9. record *(3)*
- **A** best-known performance
- **B** disk on which sound is stored
- **C** written account

10. spread *(5)*
- **A** stretched out
- **B** covered with something
- **C** scattered thinly

11. range *(5)*
- **A** area of grazing land
- **B** cooking stove
- **C** full extent

12. pitch *(9)*
- **A** tarlike material
- **B** plunging forward
- **C** quality of sound

C. When a word has one consonant between two vowels, it is usually divided into **syllables** this way:

ra / zor
di / rect

The consonant goes with the letters after it.

Directions: Write each word. Draw a line between the syllables.

13. fever
14. bacon
15. spider
16. tulip
17. labor
18. lilac
19. cupid

D. it is = it's
they shall = they'll

Sometimes we put two words together and use an apostrophe (') to show where letters have been dropped. The new word is a **contraction.**

Directions: Write the contractions for these words.

20. you are
21. we have
22. they had
23. he would
24. she will
25. I shall
26. he has

E. wind + shield = windshield

A **compound word** is made up of two or more words that combine to have one meaning. *Windshield* is a compound word because each of its parts is a word. *Windy* is not a compound word because one of its parts is not a word.

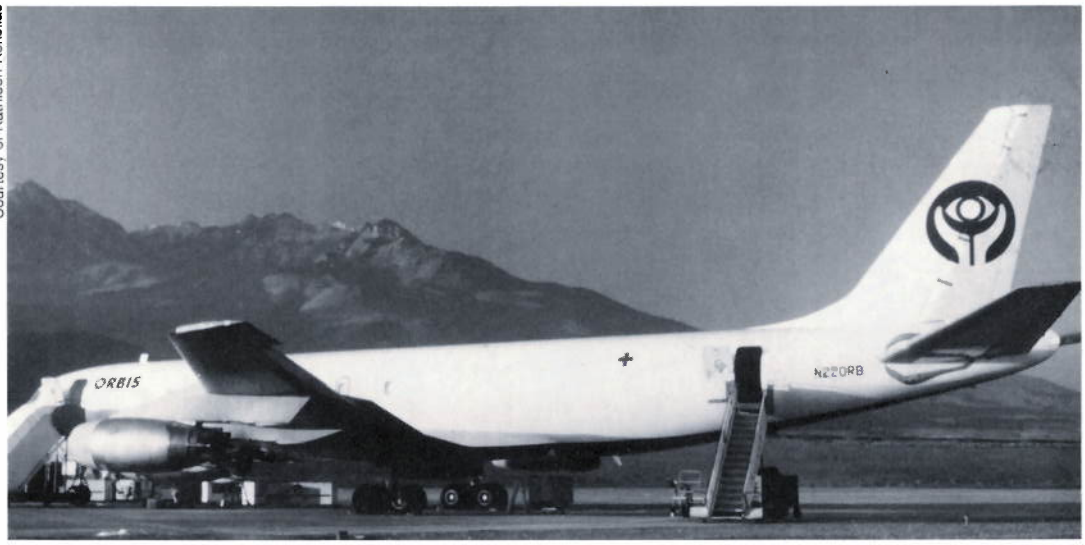
Directions: There is one compound word in each sentence. Write the compound word and draw a line between the two words in it.

27. Are mousetraps dangerous to people?
28. I left my pocketbook home by mistake.
29. The coffee spilled on the tablecloth.
30. Joan's hairbrush needs to be replaced.
31. We bought the wallpaper at a rummage sale.
32. This shotgun is a family possession.
33. Remind the gatekeeper to let us out again.

If you enjoyed reading the Orange Power Builders, you might also enjoy the following Literature Selections:

7. *The Great Wide World over There*
8. *The Old Demon*
9. *Who Knows?*

1



Courtesy of Kathleen Kokolias

Project Orbis

by Lisa Yount

1 Kathy Kokolias bent over the dark-haired man lying on the cot in the tiny recovery room. "We can go out and see your family now, Juan," she said.

2 After helping Juan stand up, she had to lead him from the room, for bandages covered his eyes and he could not see. But being led was nothing new for Juan, who had been blind since a factory accident five years before.

3 Kathy did not lead Juan through the corridors of a hospital. Instead, she helped him down the steps leading from the back door of a DC-8 jet parked at the airport in San José, Costa Rica. On the plane's tail was a blue-and-white design depicting two hands cupping an open eye. The word *Orbis* was printed on the front of the plane. *Orbis* is the Latin word for "circle" or "ring," and has come to refer to the eye. Eyes were what Project Orbis—the flying hospital that Kathy worked for—was all about.

4 A cluster of anxious faces peered from the doorway of the airport waiting area. As Kathy and Juan walked across the concrete, a woman and three young children detached themselves from the cluster and began running toward them.

5 The woman was Juan's wife, Maria. "Did the operation go well?" she asked Kathy. "Will Juan—?" Maria seemed unable to finish the sentence.

6 "Yes," Kathy said, "when we take the bandages off, Juan should be able to see."

7 "Oh, thank you, thank you!" Maria cried. She hugged Kathy, her face radiating joy.

8 Maria and Juan's joy was part of the "miracles every day" that Kathy had

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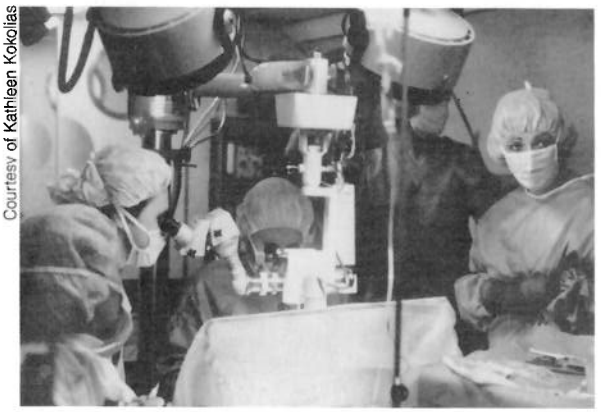
grown to expect since becoming a nurse with Project Orbis. Several hours earlier, she had been one of the nurses in the jet's tiny operating room when a surgeon operated on Juan. Carefully the surgeon removed the corneas, the normally clear "windows" in the front of Juan's eyes. Juan's corneas were no longer clear, for they had been scarred in the factory accident. Then the surgeon inserted an undamaged cornea in each of Juan's eyes. The corneas came from the eyes of a woman who had died in a traffic accident the day before. The woman's family had given permission for her eyes to be used to give someone else the gift of sight.

Courtesy of Kathleen Kokolias



Project Orbis team performing surgery

9 The precious eyes, packed in a little container filled with dry ice, had arrived in another plane just that morning. Juan and his family had been waiting at the airport, as they had been every day that week. Kathy had been delighted to tell them that donor eyes for Juan had come at last.

10 Because of the way Project Orbis worked, the operation on Juan meant sight not just for one person but for hundreds. One of the leading eye surgeons in Costa Rica had assisted the United States surgeon in the operation. In this way the Costa Rican physician learned how to use the surgical microscope that magnified Juan's eye many times and how to do this special kind of surgery. Soon the hospital where the Costa Rican surgeon worked would have its own surgical microscope. The surgeon would teach other doctors there how to use it and how to transplant corneas.

11 In the front of the Orbis plane, still more education had gone on. Eighteen other Costa Rican physicians watched Juan's operation on closed-circuit television. Nine cameras presented everything that happened in the operating room. One camera even showed the view through the microscope that the surgeons were using. The doctors wore headsets with microphones, so they could ask questions of the U.S. surgeon as he operated, and he could reply through a small microphone of his own. All these doctors were learning the transplant operation so they could perform it and teach it to others.

12 The Costa Ricans did not do all the learning, however. The day before, Kathy had helped in an operation in which a Costa Rican doctor had demonstrated a new technique that he had invented, and the U.S. surgeons had assisted and learned.

13 Right now Kathy was exhausted, for, like all her work days, this one had been long. She had been at work since seven that morning, and it was nearly six now. There would be another hour of cleaning up—and even then she was not free. Tonight, as on many nights, she and the rest of the Project Orbis crew would attend a reception given by the country or the doctors they were visiting.

14 Then, in another week, the jet would fly to a new country. Kathy anticipated visiting six Central and South American countries during her summer with Project Orbis—a different nation every two weeks.

15 Sometimes Kathy's work was heartbreaking. For every person like Juan that she and the others could help, many other people had to be turned away. It was very difficult to explain to a weeping man who clutched abjectly at her arm in the airport that she could not help his mother or his child. The physicians in the country being visited, not the Project Orbis team, decided who would be operated on. And, of course, there simply wasn't sufficient time to operate on *everyone* in need during the team's short stay in a country.

16 But the work was exciting, too. When the Project Orbis team had first landed at the airport, a crowd of several hundred people had gathered to greet and applaud them. Everywhere the group went, they were treated like celebrities.

17 Most of all, Kathy enjoyed the opportunity to learn and to share what she knew. That was what had brought most people onto the Project Orbis jet since it had begun flying in March 1982. Project Orbis officials had told Kathy that two-thirds of the

blindness in the world could be prevented or cured. Kathy was happy to play such a significant part in making that happen. She was even happier to know that after she returned to her regular nursing job, Project Orbis would fly on, saving sight around the world.

HOW WELL DID YOU READ?

Did you understand the consequences?

1. **The operation on Juan would save the sight of many people because**
   - **A** Costa Rican doctors repeated the operation on other patients as they watched it on TV
   - **B** Costa Rican doctors learned how to do the operation, which they would then perform and teach at their hospitals
   - **C** Project Orbis doctors would repeat the operation in many Costa Rican hospitals

2. **The most likely effect of the operation on Juan might be that it would**
   - **A** enable him to return to work
   - **B** inspire him to become a surgeon
   - **C** enhance his appreciation of beauty

Did you grasp the main idea?

3. **The principal purpose of the Project Orbis team was to**
   - **A** operate on as many patients as possible
   - **B** learn about medical practices in foreign countries
   - **C** instruct doctors in particular surgical techniques

Can you read between the lines?

4. **The author refers to corneas as the "windows" of the eyes probably because the corneas**
   - **A** open and close to admit fresh air
   - **B** allow light to enter the eyes
   - **C** keep foreign matter out of the eyes

Did you read carefully?

5. **The Project Orbis team concentrated its efforts on**
   - **A** treatment of diseases of the eye
   - **B** eye problems requiring surgery
   - **C** the fitting of eyeglasses

6. **Juan and his family came to the airport day after day because**
   - **A** they were waiting for donor eyes to arrive
   - **B** they hoped to convince the doctors to operate on Juan
   - **C** Project Orbis's operating schedule kept changing

7. **The people who decided that Juan was a good candidate for surgery were**
   - **A** the Project Orbis team
   - **B** the Costa Rican doctors
   - **C** Juan's family

8. **The educational process underlying the Project Orbis operations included**
   - **A** teaching and learning by both U.S. and Costa Rican doctors
   - **B** only teaching by U.S. doctors and only learning by Costa Rican doctors
   - **C** neither of the above

Did you understand the character?

9. **Kathy Kokolias joined the Project Orbis team primarily because**
   - **A** it was an exceptional opportunity for world travel
   - **B** at the time it was the only nursing job she could find
   - **C** she valued the chance to share her knowledge and skills

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. picturing *(3)*
2. looked searchingly *(4)*
3. separated *(4)*
4. shining brightly *(7)*
5. placed *(8)*
6. showed *(12)*
7. method *(12)*
8. party; gathering *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Write the letter that stands before the correct meaning.

9. lead *(2)*
- **A** guide
- **B** live
- **C** begin

10. operation *(5)*
- **A** business transaction
- **B** mathematical process
- **C** surgical procedure

11. plane *(9)*
- **A** tool
- **B** vehicle
- **C** surface

12. exhausted *(13)*
- **A** used up
- **B** developed completely
- **C** extremely tired

13. stay *(15)*
- **A** suspension of an action
- **B** period of residence
- **C** supportive device

C. Adding *er* or *ing* to a word does not change the way you divide the word into **syllables.** The *er* or *ing* is usually a separate syllable.

ham / mer ham / mer / er ham / mer / ing

Directions: Write each word and draw a line between the syllables.

14. farmer
15. storming
16. buyer
17. returning
18. welder
19. polisher
20. staggering

D. The **prefixes** *in-* and *im-* may mean either "not" or "in."

*in*sincere = not sincere
*in*habit = live in
*im*perfect = not perfect
*im*port = bring in

Directions: Decide whether the prefix in each word means "not" or "in." Write *not* or *in.*

21. immodest
22. inaccurate
23. inside
24. indirect
25. implant
26. invade

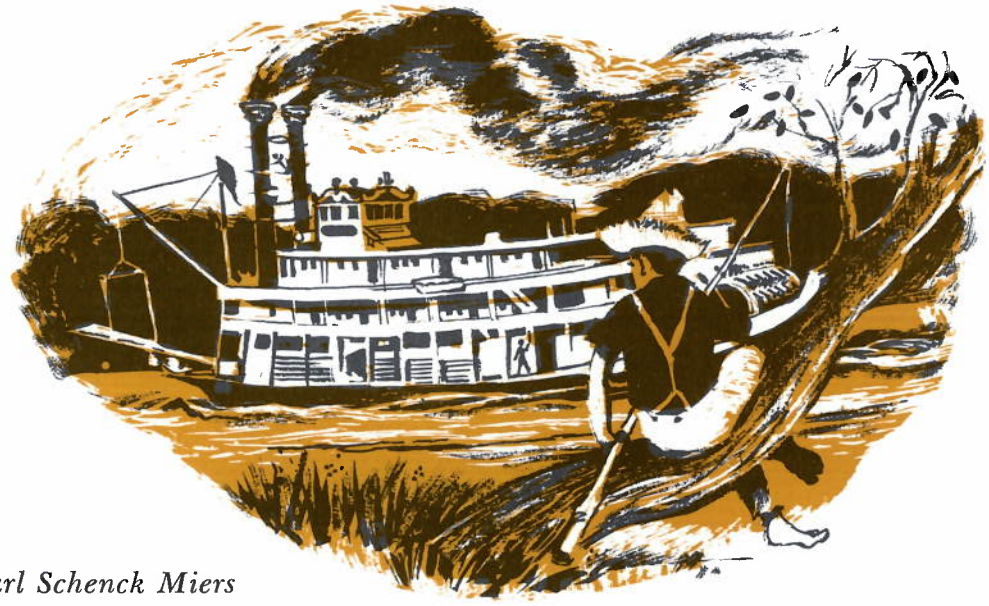
E. violin + *ist* = violinist
mail + *man* = mailman

The **suffix** *-ist* and the combining form *-man* can be added to many words. They both add the meaning "one who does something."

Directions: Find the word in column II that matches the definition in column I. Write the word.

I	II
27. person who makes people laugh	countryman
28. person who opens doors	herdsman
29. one who makes copies	humorist
30. one who delivers ice	doorman
31. person who herds animals	iceman
32. one who lives in a rural area	artist
33. person who draws or paints	copyist

2



by Earl Schenck Miers

Mississippi Steamboat Days

1 Steamboating on the Mississippi began in 1811, when the *New Orleans* was launched on the Monongahela River at Pittsburgh. It was the first steamboat intended for navigation on the Mississippi.

2 People lined the banks of the river to laugh at the weird device with its hissing engines and fancy paddle wheels. When the spectators learned that the builder of the boat intended to take his wife along on the trip, excitement and scandalized alarm spread through Pittsburgh and up the valley of the Monongahela. No one had ever heard of such folly. People said the boat would surely blow up. Almost everyone in Pittsburgh came down to the river to see the man and the woman exploded into eternity.

3 Instead, the *New Orleans* settled nicely in the water and, with a head of steam, clipped through the water at a speed of eight to ten miles an hour. To the people along the banks, success was more astonishing than disaster would have been. Cheer after cheer shook the air.

4 The trip was successful. The boat navigated the Monongahela, then followed the Ohio to Cairo, Illinois, where it joins the Mississippi. So steamboating came to the Mississippi. Soon people forgot how they had laughed at the very thought of a steamboat navigating the tricky old river.

5 In 1857, when Mark Twain, born Samuel Clemens, became an apprentice river pilot, steamboating had been a part of the Mississippi scene for a quarter of a century. The steamboat dominated life along the old river. How well Sam knew the magic cry, "S-t-e-a-m-boat a-comin'," that woke his sleepy little

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home town of Hannibal, Missouri. Ten minutes before a steamboat touched the dock, the town would be dead, and ten minutes after the boat had departed, the town would return to its snooze. Later, Sam Clemens was to take his pen name from the familiar boatman's sounding call, "mark twain," meaning that the river depth measured two fathoms, or twelve feet of water.

6 Twain's first experience as a cub pilot was aboard the steamer *Paul Jones,* out of New Orleans, and his instructor was the redoubtable Horace Bixby. Bixby knew every point, every rock, every shallow along hundreds of miles of river. He sang out each landmark once: "This is Nine-Mile Point," or "The slack water ends here abreast this bunch of China trees; now we cross over," and expected Twain to remember them forever. The youthful apprentice found this impossible. Moreover, awakened in the night to take his second watch, he fell into such a bad mood that he almost hoped that Bixby would ground the boat. But let Mark Twain tell the story in his own way, as he did in his book *Life on the Mississippi*:

7 "It was a rather dingy night, although a fair number of stars were out. The big mate was at the wheel, and he had the old tub pointed at a star and was holding her straight up the middle of the river. The shores on either hand were not more than a half mile apart, but they seemed wonderfully far away and ever so vague and indistinct. The mate said: 'We've got to land at Jones's plantation, sir.'

8 "The vengeful spirit in me exulted. I said to myself, 'I wish you joy of your job, Mr. Bixby; you'll have a good time finding Mr. Jones's plantation such a night as this; and I hope you never *will* find it as long as you live.'

9 "Mr. Bixby said to the mate: 'Upper end of the plantation or the lower?'

10 " 'Upper.'

11 " 'I can't do it. The stumps there are out of the water at this stage. It's no great distance to the lower, and you'll have to get along with that.'

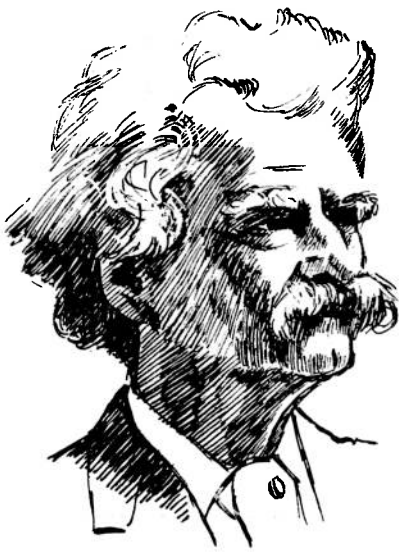
12 " 'All right, sir. If Jones don't like it, he'll have to lump it, I reckon.'

13 ". . . All I desired to ask Mr. Bixby was the simple question whether he was fool enough to really imagine he was going to find that plantation on a night when all plantations were exactly alike and all the same color. . . . The stars were all gone now and the night was black as ink. I could hear the wheels churn along the bank, but I was not entirely certain that I could see the shore. The voice of the invisible watchman called up from the hurricane deck:

14 " 'What's this, sir?'

15 " 'Jones's plantation.'

16 "I said to myself, 'I wish I might venture to offer a small bet that it isn't.' But I did not chirp. I only waited to see. Mr. Bixby handled the engine bells, and in due time the boat's nose came to the land, a torch glowed from the forecastle, a man skipped ashore, a voice on the bank said: 'Gimme de k'yarpetbag, Mass' Jones,' and the next moment we were standing up the river again, all serene."



17 From experiences such as this, Sam Clemens soon learned that there was more to piloting on the Old Mississippi than met the eye. First was the necessity of a memory. "To know the Old and New Testaments by heart," he said, "and be able to recite them glibly, forward or backward, or begin at random anywhere in the book and recite both ways and never trip or make a mistake, is no extravagant mass of knowledge, and no marvelous facility, compared to a pilot's massed knowledge of the Mississippi and his marvelous facility in the handling of it."

18 About three years after Clemens received his pilot's license, the Civil War cut off Mississippi steamboating in its prime. It never fully recovered; just when fine boats like the *Natchez* and the *Robert E. Lee* were reviving the old glory, along came the depression of 1873.

19 The steamboat era will never be forgotten; it is remembered as it was in its heyday, one of the most romantic eras in the history of the Mississippi.

HOW WELL DID YOU READ?

How exact was your reading?

1. **The first Mississippi steamboat was the**
   - **A** *New Orleans*
   - **B** *Robert E. Lee*
   - **C** *Paul Jones*

2. **The first Mississippi steamboat voyage was**
   - **A** more successful than people expected
   - **B** a complete success except for one thing
   - **C** not as successful as its owners had hoped

3. **In steamboat language, "mark twain" meant**
   - **A** danger ahead
   - **B** twelve feet of water
   - **C** shoal to starboard

Did you grasp the main points?

4. **At the beginning of the Civil War, Mississippi steamboating was**
   - **A** at its height
   - **B** slowly dying
   - **C** recovering from a depression

5. **As the boat approached Jones's plantation, Sam hoped Mr. Bixby would**
   - **A** miss the landing completely
   - **B** let him take the wheel
   - **C** successfully pick up the passengers

Can you draw the right conclusions?

6. **The landing at Jones's plantation succeeded because of the**
   - **A** brightness of the night
   - **B** ease of navigating the river
   - **C** pilot's skill

7. **Bixby's refusal to land at the upper end of the plantation showed**
   - **A** his complete knowledge of the river
   - **B** the stubbornness of his nature
   - **C** his desire to impress the cub engineer

Do you understand why?

8. **Samuel Clemens became a river pilot in order to**
   - **A** satisfy a childhood ambition
   - **B** earn his passage to New Orleans
   - **C** revive the glory of steamboating

9. **The author's purpose in writing this article was to**
   - **A** popularize the writing of Mark Twain
   - **B** describe steamboat days on the river
   - **C** demonstrate the worth of the steamboat

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. shocked; outraged *(2)*
2. foolishness *(2)*
3. fearsome; formidable *(6)*
4. dismal *(7)*
5. rejoiced *(8)*
6. dare *(16)*
7. easily; smoothly *(17)*
8. ability; skill *(17)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Write the letter that stands before the correct meaning.

9. lined *(2)*
- **A** formed a line along
- **B** formed an inner layer
- **C** drew lines on

10. clipped *(3)*
- **A** cut; sheared
- **B** moved rapidly
- **C** fastened

11. slack *(6)*
- **A** neglectful
- **B** barely moving
- **C** relaxed

12. watch *(6)*
- **A** period of shipboard duty
- **B** timepiece
- **C** sentinel; guard

13. fair *(7)*
- **A** attractive; lovely
- **B** just and honest
- **C** average

C.

th	wh	ph	qu
gh	ng	sh	

These letters are often pronounced together as a special sound. Then they cannot be separated when words are divided into **syllables.**

Directions: Write each word and draw a line between the syllables.

14. laughable
15. hyphen
16. cashier
17. weather
18. bewhiskered
19. plunger
20. inquire

D. Some **prefixes** are similar in appearance but have entirely different meanings.

pre = before in time, place, or rank
per = through; away; very

*pre*vious means "that has gone before"
*per*vious means "that can be gone through"

Directions: Use *pre-* and *per-* to complete these words. The definition after each word will help you. Write the new word that you make.

21. __pare (arrange in advance)
22. __vade (spread through)
23. __ambulate (walk around)
24. __ennial (active throughout the year)
25. __paid (paid in advance)
26. __forate (make holes through)

E. Often two words are joined together to form one word. Words made in this way are called **compound words.**

light + house = lighthouse

Directions: Make each word in column I into a compound word by joining it with a word in column II. Write the compound word.

I	II
27. mouse	vine
28. horse	ship
29. grape	trap
30. room	worm
31. high	shoe
32. book	chair
33. space	mate

The Day the Big Top Burned

by Emmett Kelly

Emmett Kelly, who died in 1979, was a clown best known for his role as the sad tramp "Weary Willie."

1 I have many wonderful memories of my days as a circus clown, but there is one day that I would rather forget: July 6, 1944. We were playing a two-day stand in Hartford, Connecticut, and the big top caught fire.

2 The day seemed like most circus days until just before that afternoon's performance. When the bugler blew first call on his cornet, I dressed in my ragged hobo costume and made up my face, complete with the putty nose, hoping it would not melt in the blistering heat.

3 As I put the finishing touches on my face, I could hear the band playing for the end of the animal display. At that instant someone ran past our dressing tent shouting, "Fire!"

4 That word is the nightmare of the circus business. I dashed outside and saw smoke curling up from the end of the main tent nearest the midway. At first I thought it might be the sideshow tent, or some straw in the menagerie that had caught fire—anything, I prayed, but the big top! That is the thing circus people dread above all else, for it involves the public, including so many children.

5 But the smoke was too black for a straw fire—it *was* the big top. I was trying to run and was making poor headway in my big, flapping clown shoes.

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Suddenly I noticed that I was carrying a water bucket that I must have grabbed automatically on leaving the dressing tent; it was the bucket of wash water that every performer keeps beside his trunk. There was nothing I could do with it because the tent was burning too high from the ground, and the flames were spreading fast.

6 I could hear grandstand chairs slamming inside the tent as people stampeded onto the hippodrome track heading toward the exits. Some were jumping twelve feet from the top rows of the grandstand and bleacher seats to the ground outside. At one place a couple of quick-thinking workmen had stretched the canvas side wall out tight to improvise an escape chute, but most of the crowd was pouring through the regular exits, and it soon became a panic.

7 Some people, after they were outside in the clear, must have remembered friends or relatives they had left inside, because they were trying to push back into the tent. I tried to get in, but it was impossible to break through that mass of frightened people. I fought the bottlenecks, yelling at the top of my lungs, "Go on! Keep moving! You can't get back in there!" At every jammed exit, circus people were busy doing the same thing.

8 It was hard to push people away from the tent, because sparks were flying and the heat drove us back from the exits. The circus fire wagons were throwing water, but it was now evident that no one could put out that fire—the big top was a goner. The canvas was nearly all burned away now, and the center poles were crashing one by one.

9 In the midst of this scene the musicians had kept on playing until the tent was afire overhead; they had jumped off the bandstand just before a flaming quarter-pole fell into their stand. May Kovar, a British lion tamer, had been in the big cage when the fire started. She stuck with her animals, like the trooper she was, sending them into the delivery chute until every one was safely out, and barely escaped with her own life.

10 Flames were licking at one of the big wagons that held the circus electric-light plants. It was parked only a few feet from the big top, and the people all around it wouldn't move. I grabbed a man standing nearby with his coat over his arm and hollered in his ear, "This thing is likely to blow up! Come with me!" We ran to the horse troughs, filled four buckets, and threw the water on the fire. At that moment I nearly got it—one of the caterpillar tractors came rumbling along to tow the wagon away from the crowd. It was almost on top of me before I realized what was happening, and as it swung around it didn't miss running over me by more than an inch.

11 City fire equipment had arrived by now and was pouring streams of water onto the big top area to cool it enough for firemen to enter. In the smoke and confusion, it was impossible to tell whether or not anyone might have been left in the tent. We circus people were ordered away from the smoking debris that, only a few minutes before, had been the biggest spread of canvas in the world.

12 I stumbled off to the dressing tent with the others. Some of us were bruised and burned from the rescue work, but all seemed to be present. Most had escaped through the performers' exits at the far end of the tent. Later it was discovered that very few spectators had used these exits. In a panic it seems to be the nature of people to try to get out the way they came in.

13 Another clown came into the tent and said, "Thank God! They say nobody was caught in the big top; I think they all got out safe." We sat around without saying much, most of us thinking about what we would do if the show folded. We had lost the big top and all the aerial rigging and seats, and this was wartime, when it was mighty hard to get replacement materials. Then we heard a sound that froze us all—the thin wail of an ambulance siren. Another and another followed, until the air was filled with the sound. Then we knew that something much more pre-

cious than canvas and rope and our 1944 tour had been lost.

14 I went outside; doctors, nurses, and first-aid workers were everywhere, carrying bodies from where the grandstands and bleachers had been. The toll of dead and dying mounted so fast that emergency crews were called in from surrounding cities.

15 Later it was found that 168 people had died in the fire—the worst circus disaster in history, and an afternoon of horror I would never forget.

HOW WELL DID YOU READ?

How carefully did you read?

1. **When the circus fire broke out, the writer was**
   - **A** watching the animal act
   - **B** performing in the main tent
   - **C** putting on his makeup

2. **The tent exits became blocked by people who**
   - **A** did not know that there was a fire
   - **B** were trying to see the fire close up
   - **C** were anxious to re-enter the tent

3. **Most of those who fled the tent left through**
   - **A** the regular exits
   - **B** the performers' exits
   - **C** a special escape chute

4. **The fire was put out by the**
   - **A** circus fire wagons
   - **B** town fire equipment
   - **C** circus performers

Did you understand why?

5. **The musicians probably kept playing during the fire because they**
   - **A** thought the fire was in another tent
   - **B** wanted to keep the crowd from panicking
   - **C** believed that the show should go on

6. **The circus people thought the show might close after the fire because**
   - **A** a great deal of equipment had been lost
   - **B** several star performers had been killed
   - **C** audiences would be afraid of being caught in another fire

When did it happen?

7. **The writer was in the greatest danger when he was**
   - **A** helping to clear the exits
   - **B** leaving the dressing tent
   - **C** throwing water on the circus wagon

8. **The writer learned of the true seriousness of the fire when he**
   - **A** saw fire engines arrive
   - **B** heard ambulances coming
   - **C** talked with another performer

Can you evaluate the evidence?

9. **The writer's attitude toward the circus people's rescue work can best be described as**
   - **A** disappointed
   - **B** puzzled
   - **C** admiring

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. collection of animals *(4)*
2. progress *(5)*
3. make on the spur of the moment *(6)*
4. blocks to progress *(7)*
5. apparent *(8)*
6. long, narrow containers *(10)*
7. ruins *(11)*
8. watchers *(12)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Write the letter that stands before the correct meaning.

9. stand *(1)*
- **A** raised platform
- **B** stop; temporary halt
- **C** view; opinion

10. straw *(4)*
- **A** something worthless
- **B** grain stems; stalks
- **C** paper tube for drinking

11. hard *(8)*
- **A** firm; unyielding
- **B** difficult to do
- **C** practical and shrewd

12. spread *(11)*
- **A** distribution; scattering
- **B** substance eaten on bread
- **C** span; expanse

13. toll *(14)*
- **A** ringing of a bell
- **B** number lost
- **C** tax; charge

C. test / ed mind / ed fin / ished washed

When *-ed* is added to a word that ends in a *t* or *d* sound, the *-ed* is a separate **syllable.** When *-ed* is added to a word that does not end in a *t* or *d* sound, *-ed* is not a separate syllable.

Directions: Write each word. Draw a line between the syllables.

14. looked
15. romped
16. mended
17. hunted
18. wasted
19. planted
20. filled

D. Synonyms are words that have the same or similar meanings. The words *sad* and *unhappy* are synonyms because they mean the same thing or nearly the same thing.

Directions: There are three words in each line. Two of the words are synonyms. Write the word that is not a synonym.

21. dashed, walked, ran
22. dread, fear, fight
23. try, attempt, succeed
24. revise, change, discard
25. bits, rags, pieces
26. emptied, shut, closed

E. Homonyms are words that sound alike but have different meanings and, usually, different spellings.

Directions: Read each sentence and the homonyms in parentheses. Write the homonym that is correct in the sentence.

27. Please (peal, peel) the potatoes.
28. The river flowed through a (plain, plane).
29. The American Revolution occurred during the (rain, reign) of George III.
30. We left the theater after the first (seen, scene).
31. Is it possible that St. George did (slay, sleigh) the dragon?
32. He (mustered, mustard) all his strength.
33. That (chord, cord, cored) is made up of these notes.

4

by Mary Walker

Mrs. Confedrington

1 In the narrow street behind the church was a café with lace curtains and glass-topped tables where Mrs. Confedrington imbibed coffee on market days between her shopping.

2 It was Friday morning and she stood at the counter waiting for the girl to finish her row of knitting and take the fourpence. The last loop of wool slipped over the points and joined the other stitches, leaving one long green needle bare.

3 "Yes?" inquired the girl.

4 Mrs. Confedrington caught a refreshing glimpse of her own face in the mirror behind the counter.

5 "Ha!" she said. "One coffee, miss." She swept four pennies across the counter with a thin, rather dirty hand, noting with further refreshment the interesting length of her nicotine-soaked fingers.

6 "Your umbrella, Mrs. Confedrington," said the vicar, overtaking her at the café door.

7 It was an ancient, sensible umbrella, with a yellow handle like a rigid banana.

8 "Thank you," she responded, noticing his eyes lingering over her and wondering what were his conclusions—not that it mattered a toss to Mrs. Confedrington.

9 She strode into the street, although it was not her custom to stride, for she considered it the responsibility of women to be beautiful.

10 "What a hat!" exclaimed the young vicar cautiously under his breath, as he returned to his coffee, "and what a face!"

11 Mrs. Confedrington proceeded superbly to the butcher's.

12 "'Ere comes 'Elen of Troy," said the young assistant to Mr. Flaxman. Flaxman grunted, moving his hands, themselves like lumps of frozen meat, among the bloody carvings on the slab.

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13 Protective coloration, Mrs. Confedrington thought, remembering botany lessons of thirty years ago. Not so protective, though—suppose he should suddenly hack one of them off in mistake for a chop?

14 If he had sold it to her she would certainly have cooked it and she and Leopold would have eaten it unaware, while Leopold sat hunched over the composition of his daily crossword puzzle with a dictionary of quotations at his elbow and his spectacles pushed up on his forehead, and while his wife, lost to the world, tipped her chair forward and peered at the *Collected Poems of T. S. Eliot* propped on the vinegar-and-mustard half of an old-fashioned cruet.

15 Four glass cherries and a lone marguerite flourished on her black straw hat.

16 "'Ighly unsuitable," said Mr. Flaxman, shaking his head between two hanging strings of sausage, as he watched her approach. No need to make people look when she had a nose that size to begin with and a mouth going all ways at once and eyes like a fish that has been dead a long time.

17 "Well, mum, what will it be?"

18 She knew what he was thinking and it still amused her, after all the years he had been thinking it. Poor Flaxman—year in, year out, at his grisly trade, what would he know of beauty?

19 Her turn for liver. He wrapped it roughly, finishing the parcel with an outer covering of newspaper.

20 "Is she cracked as well, Mr. Flaxman?" asked the assistant in a hushed voice when she had left the shop.

21 "Absolutely dotty, 'Erbert."

22 "I wouldn't like to be 'er old man," said Herbert, sniggering.

23 Mr. Flaxman took up a filleting knife and wiped the blade across his white apron.

24 "Don't matter to 'im. 'E's as cracked as she is."

25 Swinging her basket, Mrs. Confedrington passed serenely down High Street, serenely conscious that her surrealist beauty withered the passers-by.

26 They're not ready for me, she told herself, any more than they were ready for the great artists —the nearsighted, conventional minds. She likened herself to a picture by Picasso, a masterpiece that had beauty for only the initiated few, and then, of course, she began to think of Leopold.

27 Dressed in his black velvet smoking jacket, Leopold had already finished his puzzle and talked to his collection of silkworms, kept in a large shoe box in the spare room. Now he was gazing disconsolately out the window, waiting for his wife to return.

28 Suddenly she was there, inside the gate, under the monkey puzzle tree. He saluted and she brandished her basket at him.

29 "'She walks in beauty, like the night,'" he whispered as he ran downstairs to meet her. "I missed you," he said.

30 "That was nice of you."

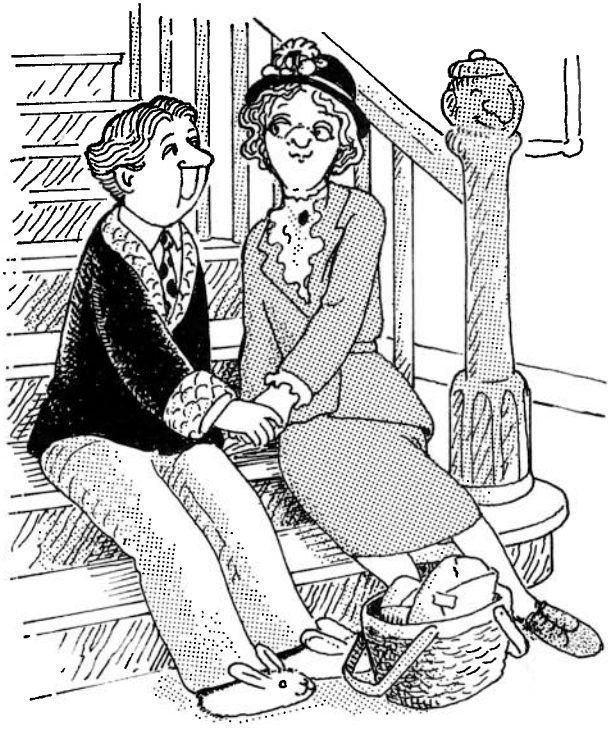
31 They sat side by side on the stairs and stretched their legs out comfortably.

32 "Leopold," she said a moment later, "there is no one else like us in the world; we are the same one. I walk in your sleep and you talk in my dreams. Leopold, do you think we have invented each other?"

33 "If we have, you are most talented—and I am a genius."

34 "I can't remember any life before you."

35 "'I wonder, by my troth, what thou and I did till we loved?'" Leopold mused, trying to think far back, and then he looked up at her quickly. "That's a fine hat, a completely esoteric hat. Other women never wear hats like that."



36 "No," she said, and she removed the hat and held it on her lap, cuddling the glass fruit with her interesting fingers.

37 Leopold sprang up briskly. "Beans on toast and coffee for lunch. I'll make it."

38 He would burn the toast, Mrs. Confedrington realized, but what did it matter? What mattered was the oneness, the aloneness, the savoring of beauty that was only for the two of them.

39 But Leopold, stirring the coffee, had a sudden glimpse of catastrophe and rushed to the door of the kitchen. Supposing their alone-togetherness should end, supposing people should begin to know better and popular taste should crowd him out? "Rachel! Rachel!" he cried.

40 She smiled a little at the panic in his voice. What should he fear? None but he would ever have an eye for her secrets, and yet the encroaching waves were already lapping around their walls. Mrs. Confedrington ran down the hallway to the unique Leopold.

HOW WELL DID YOU READ?

How exact was your reading?

1. **Mrs. Confedrington thought it the duty of women to be**
   - **A** efficient
   - **B** beautiful
   - **C** clean

2. **The vicar seemed to regard her with**
   - **A** affection
   - **B** amazement
   - **C** dislike

3. **Mr. Flaxman considered Mrs. Confedrington**
   - **A** unusual
   - **B** normal
   - **C** crazy

4. **In which paragraphs does the author present Mrs. Confedrington's feelings about her appearance?**
   - **A** 4 and 9
   - **B** 13 and 15
   - **C** 32 and 36

Did you understand the characters?

5. **Which phrase describes Mrs. Confedrington?**
   - **A** Fearful but aggressive
   - **B** Shy and retiring
   - **C** Strong and confident

6. **The relationship between Rachel and Leopold Confedrington was based on**
   - **A** love and appreciation of the same things
   - **B** a shared dislike of vicars and butchers
   - **C** their mutual enjoyment in the company of cats

7. **At the end of the story, Leopold panicked because he thought he**
   - **A** had burned the beans and toast
   - **B** might lose Rachel to someone else
   - **C** had accidentally damaged Rachel's hat

Can you draw the right conclusions?

8. **Mrs. Confedrington wasn't concerned about the attitude of others toward her because she**
   - **A** didn't realize how they felt about her
   - **B** felt everyone except her and Leopold was crazy
   - **C** thought they weren't able to appreciate beauty

9. **Mr. Confedrington was different from Mrs. Confedrington in that he lacked her**
   - **A** appreciation of poetry
   - **B** self-confidence
   - **C** fashion sense

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. drank *(1)*
2. horrible; disgusting *(18)*
3. crazy; half-witted *(21)*
4. calmly *(25)*
5. ordinary; commonplace *(26)*
6. cheerlessly *(27)*
7. shook; waved *(28)*
8. thought dreamily *(35)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Write the letter that stands before the correct meaning.

9. counter *(4)*
- **A** device for counting
- **B** surface for conducting business
- **C** stiffener for a shoe heel

10. swept *(5)*
- **A** quickly moved
- **B** cleaned with a broom
- **C** won overwhelmingly

11. lumps *(12)*
- **A** bad bruises
- **B** large quantities
- **C** shapeless blobs

12. chop *(13)*
- **A** small cut of meat
- **B** mark indicating quality
- **C** forceful blow

13. spare *(27)*
- **A** healthily thin
- **B** very little; meager
- **C** extra; unused

C. Adding *er* or *ing* to a word does not change the way you divide the word into **syllables.** The *er* or *ing* is usually a separate syllable.

ham / mer ham / mer / er ham / mer / ing

Directions: Write each word and draw a line between the syllables.

14. deliverer
15. pressing
16. sealing
17. working
18. trucker
19. returning
20. bearer

D. The **prefixes** *in-* and *im-* may mean either "not" or "in."

*in*sincere = not sincere
*in*habit = live in
*im*perfect = not perfect
*im*port = bring in

Directions: Decide whether the prefix in each word means "not" or "in." Write ***not*** or ***in.***

21. inactive
22. impress
23. insincere
24. injustice
25. ingrown
26. impersonal

E. The **suffixes** *-ish* and *-ness* can be added to many words to change their meanings. The suffix *-ish* is added to nouns. It makes them into adjectives and gives them the meaning "like."

fool*ish* = like a fool

The suffix *-ness* is added to adjectives. It makes them into nouns and gives them the meaning "quality of being."

good*ness* = the quality of being good

Directions: Add *-ish* or *-ness* to each word to make it match the meaning given. Write the new word you have made.

27. boy_____ (like a boy)
28. sharp_____ (quality of being sharp)
29. soft_____ (quality of being soft)
30. clown_____ (funny)
31. dull_____ (quality of being dull)
32. boor_____ (like a boor; rude)
33. pleasant_____ (quality of being pleasant)

5

THE FASCINATING PROCESS BY WHICH

RAIN IS BORN

by Guy Murchie

1 The year 1952 was a noteworthy one from the meteorologist's point of view. On one day in March in the town of Cilaos, on the French island La Réunion in the Indian Ocean, a tremendous downpour was reported to have dumped 73.62 inches in the course of twenty-four hours, setting the record for the heaviest measured rainfall in a single day. On November 26, 1970, 1.5 inches of rainfall were reported to have fallen during one minute of a severe storm on Guadeloupe, a French island in the Caribbean. Storms of this type—cloudbursts—can be a disaster when there are not enough plants to absorb the large quantities of water. Once I was in Los Angeles when a sudden rain drowned twenty persons in the city streets, some of them under overturned cars. But despite its dramatic suddenness, a cloudburst—or any rainfall, for that matter—is the result of a complex chain of events.

2 I used to think of clouds as hazy masses of rather evenly distributed moisture. I thought that rain was started when the cloud somehow forced out its excess water, as you would squeeze a sponge. But this is not the way it happens. The formation of rain is not just a continuance of the simple process that brings clouds into the world. It is a complicated procedure, and one that is very difficult to observe. It involves the slow growth of cloud droplets into raindrops, and the collision of these raindrops with each other.

3 The tiny droplets that form on dust particles to create a cloud are far apart from each other. They are actually as far apart in comparison to their size as the earth and the moon are. Yet there are so many of them in a cloud

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that they seem to form a uniform mass, just as the Milky Way looks like a whitish strip rather than separate stars. Each cloud droplet may be less than 1/10,000 of an inch across, yet it is floating by itself on many millions of air molecules, much as cream floats on milk.

4 Cloud droplets change with temperature, air pressure, and humidity. As humidity goes up or temperature goes down, the size of the droplet increases. More and more moisture collects on its surface, increasing its weight until the air can no longer hold it up. Then it begins to fall.

5 A raindrop can be about a million times the size of a cloud droplet. When the drop reaches a width of about 1/200 of an inch, it is likely to fall as gentle mist. At 1/50 of an inch it falls as light rain. If there is little wind and the drops are all about the same size, they will fall at about the same speed, like cars moving down a highway, and will avoid bumping into each other. In this case, the drops do not get very big, and the earth receives no more than a drizzle. But when wind currents mix drops of different sizes falling at different speeds, the bigger drops will overtake the smaller, slower ones. They will combine into bigger and bigger drops. It is in just this way that the heavy, splashing drops of a thunderstorm are formed.

6 The largest known raindrops are slightly less than a quarter-inch across—or would be if they were perfectly round. Actually a falling raindrop is seldom round, nor is it shaped like a teardrop, as you sometimes see it in cartoons. It is only while it remains a tiny droplet of cloud or fog that it floats like a perfect globe upon the air. As soon as it starts to grow and fall, it becomes unbalanced and loses its shape.

7 High-speed flash photographs show that once a raindrop has reached its full falling speed, it flattens out at the bottom, taking on a shape something like that of a parachute—or perhaps a hamburger bun is a better comparison. The flattening is caused by the pressure of the air against the raindrop passing through it. Air pushes against the bottom of the drop and pulls out its sides, increasing pressure as the drop increases in size and speed, and actually tearing it apart if it reaches the quarter-inch limit.

8 The drop changes wildly from egg shape to bun shape, from dish shape to doughnut shape. It becomes tattered in the uneven wind, and irregular pieces begin to fly off. This has been found to happen when the drop reaches an airspeed of eighteen miles an hour. The discarded pieces, being smaller than the main drops, fall through the air more slowly until, by colliding with other droplets, they in turn approach a quarter-inch size, and the cycle repeats itself.

9 We can be grateful for the fact that rain never falls faster than eighteen miles an hour through the lower air. Nor can the drops be more than a quarter-inch thick, no matter how numerous they may be. Even when the swift downward drafts of a storm lash the rain against the ground at seventy miles an hour, the rule holds, for the eighteen miles an hour is airspeed, not ground speed. The storm-lashed rain still can move only a little faster than the air.

10 Much of the rain that is formed high in the sky never falls to earth. A draft of hot, dry air puffing upward through a cloud is likely to prevent even the mightiest of rains from falling. The draft may even evaporate the cloud before it reaches the ground. This often happens over the Sahara. On the other hand, this great puff of hot air may carry the rain upward, shake it

about in the chill attic of the heavens, and then dash it all at once upon our heads. This is the manner in which the dramatic downpour known as a cloudburst is created.

11 Whether it descends in violent torrents or as gentle mist, each spatter on the pavement marks the end of a story, for each raindrop has completed its individual cycle of growth and change.

HOW WELL DID YOU READ?

Did you grasp the important facts?

1. **The speed at which a raindrop falls is determined by its**
   - **A** size
   - **B** shape
   - **C** age

2. **Raindrops bump into each other when they**
   - **A** are of different sizes
   - **B** travel at different speeds
   - **C** both **A** and **B**

3. **When raindrops bump into one another, they**
   - **A** combine
   - **B** split apart
   - **C** slow down

Do you remember the details?

4. **The size of a cloud droplet increases when**
   - **A** temperature goes down
   - **B** humidity goes up
   - **C** both **A** and **B**

5. **A raindrop has a maximum**
   - **A** airspeed of about seventy miles an hour
   - **B** size of about one-quarter inch
   - **C** both **A** and **B**

What do these things have in common?

6. **A cloudburst and a thunderstorm are alike in that both**
   - **A** occur without warning
   - **B** are accompanied by lightning
   - **C** are caused by wind currents

Did you notice the comparisons?

7. **The author says that a cloud is most like a**
   - **A** parachute
   - **B** group of stars
   - **C** sponge

8. **Raindrops falling at the same speed are compared to**
   - **A** stars moving in their individual paths
   - **B** cars moving down a highway
   - **C** tiny globes floating on air

9. **The author compares cloud droplets to cream because they**
   - **A** float
   - **B** are white
   - **C** are found in the Milky Way

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. outstanding *(1)*
2. vivid; exciting *(1)*
3. complicated *(1)*
4. divided; scattered *(2)*
5. even; not varying *(3)*
6. ragged; torn *(8)*
7. thrown away *(8)*
8. swift streams *(11)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Write the letter that stands before the correct meaning.

9. severe *(1)*
- **A** strict
- **B** violent
- **C** plain

10. formation *(2)*
- **A** arrangement
- **B** making
- **C** structure

11. lash *(9)*
- **A** fasten with a rope
- **B** rebuke; ridicule
- **C** strike with great force

12. draft *(10)*
- **A** current
- **B** rough sketch
- **C** check

13. end *(11)*
- **A** intention
- **B** destruction
- **C** completion

C. *re* (again)
un (not)
im (not)

A knowledge of these **prefixes** will provide you with a key to the meaning of many unfamiliar words. Some words that have these prefixes are

*re*read = read again
*un*just = not just
*im*perfect = not perfect

Directions: The words in column II have the prefix *re-, un-,* or *im-*. Write the word that matches each definition in column I and underline the prefix.

I	II
14. not charitable	unlimited
15. not courteous	retreat
16. without restriction	impossible
17. withdraw; go back	resound
18. not able to be done	unconcerned
19. sound again	ungenerous
20. not caring	impolite

D. Sometimes *re-, un-,* and *im-* are **not prefixes**—they do not join with a base word to change its meaning. In the words *rest, unit,* and *imp, re-, un-,* and *im-* are not prefixes.

Directions: All the words listed begin with *re-, un-,* or *im-*. If the beginning is a prefix, write **P.** If it is not a prefix, write **N.**

21. improbable
22. university
23. reckoning
24. recall
25. imagine
26. underestimate

E. Many words are built on **base words** that you know well.

open — opened, opening, opener

Directions: All but one of the words in each line are built on the same base word. Find the wrong word and write it.

27. cast, lasting, broadcast, casts
28. cease, deceased, increasing, unceasing
29. enjoy, join, adjoin, joint
30. avoid, unavoidable, avowing, avoidance
31. warring, warily, warship, warlike
32. company, accompany, companion, compose
33. prove, approve, provision, disprove

6

by Albert Q. Maisel

The Ten-Gallon Hat

ONE OF MANY THINGS THE UNITED STATES OWES TO MEXICO

1 To all the world, nothing seems more completely American than the cowboy. Yet the truth is that the cowboy's horse, clothes, and trade are all part of the rich heritage contributed by Mexico to her northern neighbor.

2 Even the word *cowboy* is a translation of the Mexican term *vaquero.* The word *cowboy* was unknown to the American settlers who first headed west to Texas in the 1820's. These people thought of themselves as farmers. In fact, the only cattle most of them brought were a cow or two for milk and a yoke of oxen to draw their plows. It was their Mexican neighbors—the *Tejanos* whose herds had roamed the open ranges since the early 1700's—who introduced them to cattle raising, taught them to use the lariat, the branding iron, and the horned saddle, and showed them how to break the wild mustangs and round up the free-ranging longhorns. So well did the new Texans take to *Tejano* ways that soon you spoke fightin' words if you referred to them as anything as ordinary as mere "farmers." They had been changed into saddle-proud ranchers.

3 Later, as the cattle industry spread all over the West, its Mexican origins were largely forgotten. But even today the language of the rangeland clearly shows how great were the cowboy's borrowings. *Corral, pinto, palomino, mes-*

Adapted from They All Chose America *by Alfred Q. Maisel.*

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quite, bronco, rodeo, mesa, canyon, arroyo, loco, plaza, fiesta, pronto—by the hundreds Mexican words slipped into English with only a change in accent. Borrowed "by ear," other words underwent weird alterations. From *sabe* came *savvy, jáquima* turned into *hackamore, chaparajos* was shortened to *chaps, estampida* was converted into *stampede, vamos* emerged as *vamoose,* and the *juzgado* gave birth to *hoosegow.* Even the famed ten-gallon hat got its name not from some Texan's tall tale but from a Mexican song about a gaily decorated hat, or *sombrero galoneado.*

4 In countless other ways the people of the United States are indebted to the Mexicans who once lived in the old Southwest. There were only seventy-five thousand of them when Mexico ceded the region to the United States, and these were scattered from the Gulf Coast in the east to the shores of the Pacific in the west. They had lived in the borderlands since 1598, more than twenty years before the Pilgrims sailed for the New World. In the course of more than 250 years they had left their mark on the land. Many of the western states in the United States still bear the lovely lyrical names the Mexican settlers first wrote upon their maps. So do countless rivers and mountains, and thousands of cities and towns—from Corpus Christi in Texas to all the Sans and Santas along the Pacific shore.

5 Through trial and error, the rugged Mexicans had learned to survive and prosper in the dry, half-desert land. When English-speaking people poured into the region, the Spanish-speaking people shared their knowledge with the new settlers, making things much easier for them. Settlers in other parts of the United States did not have this advantage.

6 In all the rest of the country, pioneers had to break their own trails. But those who headed west in gold rush days could follow the Santa Fe Trail from the Missouri to the Rockies. In the old settlements of New Mexico, the wagon trains could rest their oxen and replenish their supplies before moving on down the Old Spanish Trail or the Tucson-Yuma route.

7 In the 1850's, army engineers were sent west to survey the railroad routes that would link East with West. The northern parties had to find their own way through vast stretches of little-explored territory, but in the Southwest the surveyors merely remapped the trails that had been packed hard over the years by Mexican mule trains. Two major railroads—the Southern Pacific and the Santa Fe—and many main highways were built along the routes made by the early Spanish settlers when they first spread out into the new land.

8 Early migrants from the East thought of the Southwest as a great desert, a land that had to be passed through, but was hardly to be settled upon. However, they changed their minds when they saw the rich green fields along the Rio Grande, fields that had been irrigated since the early 1600's. In time the newcomers were able to turn even desert into some of the most fertile farmland in all the nation.

9 Water laws gave the new settlers some trouble at first. They tried to use a system under which the landowners along the banks of a stream controlled its waters. This system worked well in the water-rich East, but in the dry lands of the Southwest it gave the lucky more water than they needed, while others on higher ground got none at all. In time all the western states had to switch over to the Mexican way—sharing water rights among all the owners whose land could be irrigated.

10 Western sheep farmers, too, owe a great debt

to their forerunners. For the small flocks that the early Mexican settlers had brought to Santa Fe had multiplied into large herds by the time the United States took over the Southwest. New Mexico supplied sheep to ranges all over the country. With the sheep went *pastores,* who still form a large percentage of the herders in North America. Until the introduction of sheep-clipping machines, sheepshearing was to a large extent a Mexican skill for which sheep ranchers in the States would bid eagerly.

11 Mexicans have played an important part not only in cattle and sheep farming, but in mining as well. It was a Mexican who discovered the great Santa Rita copper deposit in New Mexico. Today, miners of Mexican descent still form a major part of the work force in most of the copper mines of the Southwest. In industry, farming, and countless other fields, the United States owes a great deal to her neighbor.

HOW WELL DID YOU READ?

What was the author's purpose?

1. **The purpose of this article is to demonstrate**
   A how the Southwest was settled
   B what Mexicans gave to the United States
   C how languages change and grow

How carefully did you read?

2. **The first American settlers went to Texas to**
   A raise crops
   B mine gold
   C raise cattle

3. ***Galoneado* is an example of**
   A names Mexican settlers wrote on maps
   B words Eastern settlers borrowed by ear
   C knowledge the Mexicans shared with new settlers

Can you organize the facts?

Does the United States owe a debt to Mexico for the following things? If so, write *yes.* If not, write *no.*

4. Techniques for breaking mustangs
5. Use of oxen to pull plows
6. The Santa Fe Trail
7. Modern Western water laws
8. Sheep-clipping machines

Can you make the right inference?

9. **The fact that Easterners borrowed words such as *corral, bronco,* and *canyon* suggests that**
   A these objects were not common in the East
   B Spanish is a more precise language than English
   C they knew the Southwest would become part of the United States

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. syllable emphasis *(3)*
2. came forth *(3)*
3. gave; transferred *(4)*
4. musical *(4)*
5. thrive *(5)*
6. renew *(6)*
7. producing abundantly *(8)*
8. ancestry *(11)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Write the letter that stands before the correct meaning.

9. trade *(1)*
- **A** exchange
- **B** customers
- **C** job

10. break *(2)*
- **A** escape from suddenly
- **B** shatter
- **C** tame by force

11. left *(4)*
- **A** caused to remain
- **B** entrusted
- **C** abandoned

12. trial *(5)*
- **A** experiment
- **B** hardship
- **C** legal process

13. fields *(11)*
- **A** groups of contestants
- **B** areas of knowledge
- **C** stretches of open land

C. *re* (again)
un (not)
im (not)

A knowledge of these **prefixes** will provide you with a key to the meaning of many unfamiliar words. Some words that have these prefixes are

*re*read = read again
*un*just = not just
*im*perfect = not perfect

Directions: The words in column II have the prefix *re-, un-,* or *im-*. Write the word that matches each definition in column I and underline the prefix.

I	II
14. not likely	unobserved
15. seize again	immortal
16. bring to mind again	unusable
17. not seen	unusual
18. not able to be used	recapture
19. deathless	improbable
20. not happening often	recall

D. Sometimes *re-, un-,* and *im-* are **not prefixes**—they do not join with a base word to change its meaning. In the words *rest, unit,* and *imp, re-, un-,* and *im-* are not prefixes.

Directions: All the words listed begin with *re-, un-,* or *im-*. If the beginning is a prefix, write **P.** If it is not a prefix, write **N.**

21. return
22. rental
23. ungrateful
24. immovable
25. uncle
26. impenitent

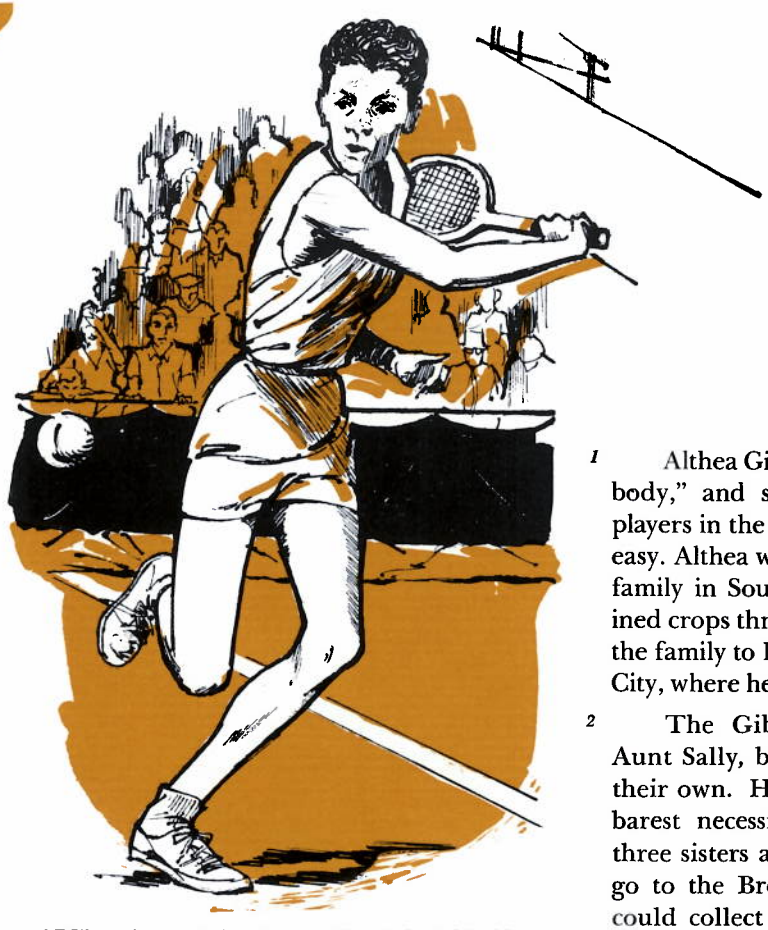
E. Many words are built on **base words** that you know well.

fasten — fastened, fastening, fastener

Directions: All but one of the words in each line are built on the same base word. Find the wrong word and write it.

27. avenge, revenge, vegetate, vengeance
28. deport, export, import, imposter
29. open, reopening, opinion, opened
30. title, entitled, titles, tithe
31. claim, proclaim, clam, claiming
32. pressure, presses, impress, present
33. rest, resist, resting, rested

7



ALTHEA GIBSON'S DETERMINATION CARRIED HER FROM

Tough Teen to Tennis Queen

by Aylesa Forsee

Based on Women Who Reached for Tomorrow. © *1960 by Aylesa Forsee. By permission of the Forsee Collection, Special Collections, University Libraries, University of Colorado at Boulder.*

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1 Althea Gibson had always wanted to be "somebody," and she became one of the top tennis players in the world. But the road to fame was not easy. Althea was born into a Negro sharecropper's family in South Carolina. After bad weather ruined crops three years in a row, Mr. Gibson moved the family to Harlem, a tough section of New York City, where he got a job as a handyman in a garage.

2 The Gibsons lived at first with Althea's Aunt Sally, but later moved to an apartment of their own. Her father's wages provided only the barest necessities. In summer Althea and her three sisters and brother would take baskets and go to the Bronx Terminal Market, where they could collect rotting food that had been tossed aside.

3 Rough gangs roamed Harlem, but Althea held her own against tough girls, and even against tough boys. Once when she saw a leader of one of the gangs robbing her uncle, she fought the attacker to a draw.

4 The block on which Althea lived was closed to traffic during the day to provide a playground. Althea and the other children played there all day, even when the pavement was so hot they could feel it through their shoes. They played stickball, baseball, and paddle tennis—the latter on an area marked off like a half-sized tennis court. The rules resembled those of tennis, but the equipment used was a sponge rubber ball and crude bats that looked much like ping-pong paddles. Tomboyish Althea became paddle tennis champion of the block. Later she won medals competing against other Harlem play streets.

5 By the time she entered junior high school,

Althea had lost interest in everything except ball games. School imposed too many restraints. The one good thing about it was the gym, which was open most of the time.

6 Althea studied just enough to graduate from junior high in 1941. That summer one of the play directors, impressed with Althea's skill at paddle tennis, bought her a secondhand tennis racket. After she had practiced for a time hitting balls against the wall at the handball court, the play leader took her to the Cosmopolitan Club to play with Fred Johnson, the club's tennis pro. Althea did so well that some of the club members contributed toward tennis lessons for her.

7 That fall Althea entered high school. At first she attended regularly, but then she became bored and stayed away more and more frequently. At home she begged to be allowed to find a job.

8 Eventually she was offered a job as a mail girl. For the first time in her life she felt important as a person. She was proud to be able to contribute to family expenses and to have spending money. Althea had been on the job for six weeks when several of her friends stopped by one Friday afternoon on their way to the movies. She went with them; Monday she was fired.

9 At first Althea was resentful, but later she was able to see that she had failed the important test of reliability. Nevertheless, that was cold comfort as she looked for a job as good as the one she had lost. Lack of education restricted her at every turn.

10 In the summer of 1942 Althea entered the New York State Open, sponsored by the almost all-Negro American Tennis Association, and won the girls' singles. Four years later the ATA paid Althea's expenses so that she could participate in matches held in Ohio. She lost in the finals, but she played well enough to attract the attention of two Negro doctors with an interest in athletics, Dr. Hubert A. Eaton and Dr. Robert Johnson. They pointed out to her her need for schooling, and they made a gracious offer. During the winter Althea would live in the Eaton home and attend high school. The summers she would spend with the Johnsons, and Dr. Johnson would take her around to major tennis meets.

11 Althea appreciated the offer, but the prospect of entering high school at nineteen sounded bleak. Nevertheless, she was beginning to understand the importance of education. Her mind made up, she took the train to join the Eatons.

12 During the first few weeks of school she had to tell herself many times that education was one of the ways you got to be someone. Her manners and her interests set her apart from the other students. But after she joined the band and was made captain of the basketball team she began to adjust.

13 In the summer she went to the Johnson home. While she was there, Althea learned more than how to serve and lob. Tennis, she discovered, took self-discipline, sportsmanship, and character as well as strength and skill. With Dr. Johnson and other players he was interested in, she toured the ATA tennis circuit, winning nine singles titles, including the ATA women's championship.

14 With the same determination she was showing in tennis, Althea stuck to her studies and in June of 1949 finished high school tenth in her class. Now intent on making something of her life as well as of her tennis, she applied for and won a scholarship to Florida A. and M. College.

15 Her personal battles were not over yet, but Althea had won a major victory. At last she had purpose in her life strong enough to reinforce her deep craving to be somebody, to make her mark in the world. The rest is sports history. Althea went on to win twice at Wimbledon, to

receive the Forest Hills medal, and to become the first U.S. woman to earn the Pan-American woman's singles title in tennis. By 1958, Althea had reached the height of success in tennis.

16 In sports no champion remains at the top. Having reached the top, Althea put down her racket and retired from competition. But her name will always be recorded among tennis greats. In 1971, she was inducted into the International Tennis Hall of Fame. Even more significant, however, is the fact that the tough, undisciplined girl from Harlem got to be "somebody."

HOW WELL DID YOU READ?

Did you see the writer's purpose?

1. **The writer tells of young Althea's trips to the Bronx Terminal Market in order to show her**
   - **A** determination
   - **B** toughness
   - **C** poverty

How carefully did you read?

2. **Paddle tennis is most similar to tennis in its**
   - **A** equipment
   - **B** rules
   - **C** court

3. **The first to encourage Althea in tennis was**
   - **A** a pair of doctors
   - **B** the ATA
   - **C** a play director

Did you understand why?

4. **Althea lost her first job because she was**
   - **A** poorly educated
   - **B** too involved in sports
   - **C** not reliable enough

5. **Althea entered college in order to**
   - **A** further her sports career
   - **B** enrich her personal life
   - **C** please those who helped her

6. **The ATA was helpful to Althea because it gave her**
   - **A** a college scholarship
   - **B** financial aid
   - **C** professional lessons

Can you draw the right conclusions?

7. **The greatest turning point in Althea's life was when she**
   - **A** found her first job
   - **B** accepted the doctors' offer
   - **C** lost in the Ohio matches

8. **In becoming a sports champion, Althea's greatest handicap was the fact that she**
   - **A** was a Negro
   - **B** needed self-discipline
   - **C** lacked an education

9. **To the writer, Althea is outstanding because she**
   - **A** rose to the top from a humble beginning
   - **B** completed her education while becoming a tennis champion
   - **C** realizes she will not remain at the top forever

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. one who does various small jobs *(1)*
2. were similar to *(4)*
3. restrictions *(5)*
4. indignant *(9)*
5. dependability *(9)*
6. take part *(10)*
7. gloomy; cheerless *(11)*
8. meaningful *(16)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Write the letter that stands before the correct meaning.

9. draw *(3)*
- **A** thing that attracts
- **B** tie; stalemate
- **C** pull; drag

10. attended *(7)*
- **A** waited upon
- **B** accompanied
- **C** was present

11. gracious *(10)*
- **A** kind; courteous
- **B** merciful
- **C** indulgent

12. appreciated *(11)*
- **A** was grateful for
- **B** estimated the worth of
- **C** was fully aware of

13. racket *(16)*
- **A** dishonest scheme
- **B** noisy confusion
- **C** light oval-framed bat

C. oi — oy ie — ei
ou — ow eu — ew
au — aw

These letter combinations are often pronounced together in a special sound. Then they cannot be separated when words are divided into **syllables.**

Directions: Write each word and draw a line between the syllables.

14. soil
15. grieve
16. coward
17. neutral
18. royal
19. nautical
20. scour

D. The **prefix** *com-* may be combined with many words to give them the meaning "with" or "together." It is spelled in various ways, depending on the first letter of the word to which it is joined.

col before *l*
cor before *r*
con before *c, d, f, g, j, n, q, s, t,* and *v*
co before *h, w, a, e, i, o,* and *u*

Directions: Decide which form of the prefix *com-* to use to make each word. Add the prefix and write the whole word.

21. __laborate
22. __axial
23. __join
24. __relate
25. __bine
26. __versation

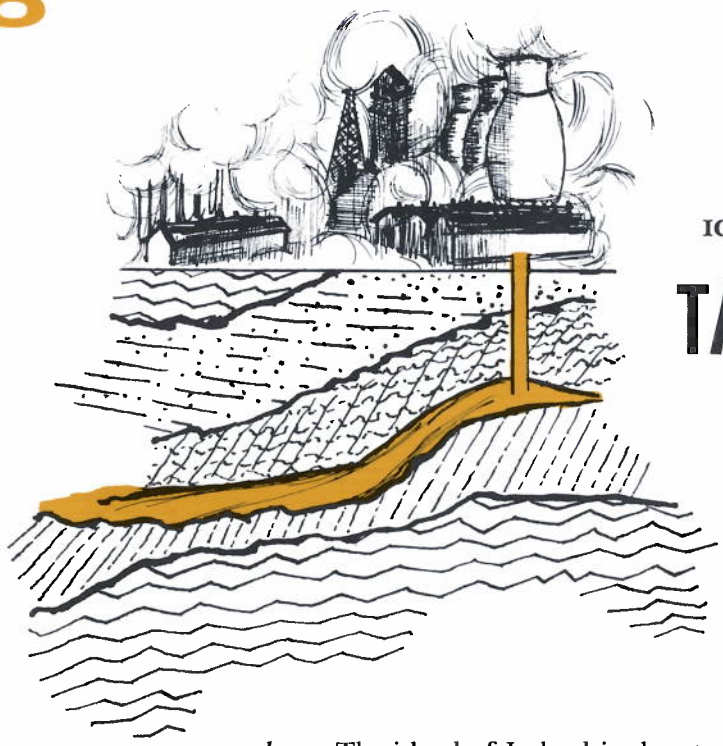
E. Often two words are joined together to form one word. Words made in this way are called **compound words.**

mail + box = mailbox

Directions: Make each word in column I into a compound word by joining it with a word in column II. Write the compound word.

	I	II
27.	sleepy	leaf
28.	clover	people
29.	tooth	head
30.	towns	paper
31.	tread	up
32.	line	brush
33.	wall	mill

8



ICELAND MAKES SURPRISING USE OF

TAME VOLCANOES

by Willy Ley

1 The island of Iceland is almost as large as Cuba, but while Cuba supports almost 10 million people, Iceland has only 240,000. Because of its climate, three-quarters of its area is uninhabitable, and even the remaining quarter is thinly settled. Iceland lies far north in the Atlantic, its northernmost tip actually touching the Arctic Circle. It contains huge, permanent snowfields. The largest one covers some 3,280 square miles—about three times the area of Rhode Island. Yet bananas have been grown and harvested on the island!

2 How can a tropical fruit be grown in Iceland? It is possible because Iceland is an island of active volcanoes and hot springs, as well as an island of snowfields and glaciers. For centuries it has been called the "island of fire and ice." The word *geyser,* which is used almost all over the world, was originally the Icelandic name for one of their great hot springs.

3 Iceland is completely volcanic. Its mountains are either dead volcanoes or active ones; its plains are frozen lava flows. Where there are volcanoes, either dead or active, there are hot springs. Iceland has about fifteen hundred of them.

4 The inhabitants of Iceland have, of course, made use of the hot springs from the time the island was settled. It is far easier to wash pots and pans and clothing

From Engineers' Dreams *by Willy Ley. Copyright 1954 by Willy Ley. Reprinted by permission of Olga Ley.*

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in hot water than in cold. The women took advantage of this fact if a usable hot spring was nearby. In New Zealand, which has hot springs too, the native women do the same thing. The American Indians probably made similar use of the springs in what is now Yellowstone National Park.

5 There is a difference, however, between washing pots and pans in a hot spring that happens to be handy, and really *using* a hot spring. As recently as 1910 no Icelander had any conception of how much his island's hot springs could do for him. Nor did the citizens of other, larger nations. In fact, one Hungarian scientist who tried to promote the use of hot springs in his native land got almost nowhere.

6 When World War I was being fought, Dr. Szilard Zielinsky worked out a plan. A hot spring has to force its way to the surface through rocks and around obstacles, causing the flow to be irregular. But opening up a smooth well for such a spring could provide a steady supply of hot water. In short, if the locality were right it would be possible to drill for hot water just as one drills for cold water or for oil. Even if the naturally hot water should prove useless for bathing or cooking because of chemicals dissolved in it, it could still be used to heat homes and factories. Since there were hot springs near Budapest, the professor took his plan to the government leaders of that city. He explained to them that although the local springs were not large enough to heat the whole city, their use would save a great many tons of coal each year.

7 Because of the war, coal was in short supply. One would think that the city council and the government would have jumped at the opportunity. They didn't. They said that the plan could not be carried out in time of war because of lack of materials and labor. They added that it was not even a postwar project, for it couldn't be carried out in time of peace either. One could not drill a hot well, they said, and even if it were possible to do so, the hot water could not be sent through pipes and still remain hot by the time it reached the other end of the pipelines.

8 Budapest is still without volcanic heat, but Iceland has it. The Icelanders began in 1930, on a small scale, at first. It must be admitted that they were lucky. Their natural hot water could have been fouled with sulfur or muddied with sediments, but it turned out to be almost free of impurities. It is so pure that it can be used directly in swimming pools—with the addition of a little cold water, for the water as it comes out of the ground is about 190 degrees Fahrenheit.

9 In Reykjavik, the capital of Iceland, the first buildings to be heated were the State Hospital, two public schools, and fifty-six private homes.

10 The city's heating process closely resembles the hot water system supplying an apartment building, except that the "furnace" is underground heat. At the pumping stations the water first runs through filters to remove the small amount of sediment that is in it. After passing through the filters, it travels for miles above ground in huge conduits. Only a small amount of heat is lost in this process. Near the city it is stored in large tanks for distribution. Each month users receive a bill for heat just as they do for other utilities.

11 Average production is about 25,000 gallons per minute, or about 5 million cubic feet per day. In July the city of Reykjavik needs 2.5 million cubic feet a day, but in winter it needs some 6.5 million cubic feet.

12 In addition to taking care of the city's needs, the hot water heats the greenhouses where food plants from warm climates are grown. These greenhouses take up hundreds of thousands of square feet, and this space grows steadily, much like the plants inside.

13 The Icelanders were so taken with the economy and efficiency of tapping hot springs that they decided to drill deep enough to tap volcanic steam. Thus an unlimited source of power became available to the ingenious people of this far northern island.

HOW WELL DID YOU READ?

Why were the comparisons made?

1. **The writer compared Iceland with Cuba in order to**
   - **A** emphasize the fact that Iceland has an arctic climate
   - **B** stress Iceland's large size
   - **C** show the nature of volcanic lands

2. **The writer compared Iceland and Budapest in order to emphasize**
   - **A** Budapest's pioneering in the use of hot springs
   - **B** Iceland's luck in having clear springs
   - **C** Iceland's courage in trying a new idea

How carefully did you read?

3. **Iceland is called the "island of fire and ice" because**
   - **A** it grows tropical fruits in an arctic climate
   - **B** volcanoes and glaciers exist there
   - **C** extremes of climate are found there

4. **The word *geyser* originally referred to a**
   - **A** snowfield
   - **B** hot spring
   - **C** volcano

5. **Hungary, Iceland, and New Zealand are similar in that they**
   - **A** are completely volcanic
   - **B** have natural hot springs
   - **C** drill for hot water

6. **Dr. Zielinsky thought Budapest could use its hot springs to**
   - **A** heat the entire city
   - **B** help save coal
   - **C** grow tropical fruit

7. **Reykjavik's water first passes through**
   - **A** filters
   - **B** conduits
   - **C** tanks

8. **Before Iceland's hot spring water can be used in swimming pools, it must be**
   - **A** filtered
   - **B** cooled
   - **C** both **A** and **B**

What does the writer think?

9. **The writer believes that Iceland's system**
   - **A** will be copied by other nations
   - **B** has been improved upon
   - **C** should be extended outside Reykjavik

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. reaped; gathered *(1)*
2. periods of one hundred years *(2)*
3. idea *(5)*
4. encourage *(5)*
5. obstructions *(6)*
6. pipes *(10)*
7. getting results while exerting least effort *(13)*
8. clever *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Write the letter that stands before the correct meaning.

9. supports *(1)*
- **A** comforts
- **B** provides for
- **C** endures

10. springs *(2)*
- **A** jumps forward
- **B** elastic coils of wire
- **C** waters flowing from the ground

11. settled *(4)*
- **A** made stable
- **B** agreed upon
- **C** colonized

12. fouled *(8)*
- **A** entangled
- **B** dirtied
- **C** disgraced

13. tap *(13)*
- **A** draw liquid from
- **B** strike at lightly
- **C** add a leather heel piece

C. test / ed mind / ed fin / ished washed

When *-ed* is added to a word that ends in a *t* or *d* sound, the *-ed* is a separate **syllable.** When *-ed* is added to a word that does not end in a *t* or *d* sound, *-ed* is not a separate syllable.

Directions: Write each word. Draw a line between the syllables.

14. lashed
15. buzzed
16. fished
17. glided
18. treated
19. carved
20. dated

D. Synonyms are words that have the same or similar meanings. The words *boy* and *lad* are synonyms because they mean the same thing or nearly the same thing.

Directions: There are three words in each line. Two of the words are synonyms. Write the word that is not a synonym.

21. strange, unusual, usual
22. present, receive, gift
23. harvest, plant, reap
24. probably, certainly, definitely
25. plan, plain, project
26. manpower, laborers, work

E. Homonyms are words that sound alike but have different meanings and, usually, different spellings.

Directions: Read each sentence and the homonyms in parentheses. Write the homonym that is correct in the sentence.

27. When they heard the bells (peeling, pealing), they knew that the battle had been won.
28. The salesman followed his usual (root, route).
29. May we bring another (guessed, guest) to your party?
30. There was only one (sail, sale) visible on the lake.
31. The (heel, heal) of my shoe needs to be repaired.
32. Stop at the third office down the (hall, haul).
33. Mrs. Potter was just about to (ring, wring) out the clothes when she heard the doorbell.

9

The Open Window

by Saki (H. H. Munro)

1 "My aunt will be down presently, Mr. Nuttel," said a very self-possessed young lady of fifteen; "in the meantime you must try and put up with me."

2 Framton Nuttel endeavored to say the correct something which should duly flatter the niece of the moment without unduly discounting the aunt that was to come. Privately he doubted whether these formal visits on a succession of total strangers would do much toward helping the nerve cure which he was supposed to be undergoing.

From THE COMPLETE SHORT STORIES OF SAKI *(H. H. Munro). Copyright 1930, 1958 by The Viking Press, Inc. Reprinted by permission of Viking Penguin, Inc.*

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3 "I know you will bury yourself down there and not speak to a living soul, and your nerves will be worse than ever from moping," his sister said when he was preparing to migrate to this rural retreat. "I shall just give you letters of introduction to the people I know there. Some of them, as far as I can remember, were quite nice."

4 Framton wondered whether Mrs. Sappleton, the lady to whom he was presenting one of the letters of introduction, came into the nice division.

5 "Do you know many of the people round here?" asked the niece, when she judged that they had had sufficient silent communion.

6 "Hardly a soul," said Framton. "My sister was staying here, at the rectory, some four years ago, and she gave me letters of introduction to some of the people here."

7 "Then you know practically nothing about my aunt?" pursued the self-possessed young lady.

8 "Only her name and address," admitted the caller. He was wondering whether Mrs. Sappleton was in the married or widowed state. An indefinable something about the room seemed to suggest masculine habitation.

9 "Her great tragedy happened just three years ago," said the child; "that would be since your sister's time."

10 "Her tragedy?" asked Framton.

11 "You may wonder why we keep that window wide open on an October afternoon," said the niece, indicating a large French window that opened on a lawn.

12 "Out through that window, three years ago to a day, her husband and two brothers went off for their day's shooting. In crossing the moor to their favorite snipe-shooting ground they were all three engulfed in a treacherous piece of bog. Their bodies were never recovered." Here the child's voice lost its self-possessed note and became falteringly human. "Poor aunt always thinks that they will come back someday, they and the little brown spaniel that was lost with them, and walk in at that window just as they used to do. She has often told me how they went out, her husband with his white waterproof coat over his arm, and Ronnie, her younger brother, singing 'Bertie, why do you bound?' as he always did to tease her, because she said it got on her nerves. Do you know, sometimes on still, quiet evenings like this, I almost get a creepy feeling that they will walk in through that window—"

13 She broke off with a little shudder. It was a relief to Framton when the aunt bustled into the room with a whirl of apologies for being late in making her appearance.

14 "I hope you don't mind the open window," said Mrs. Sappleton briskly; "my husband and brothers will be home directly from shooting, and they always come in this way. They've been out for snipe in the marshes today."

15 She rattled on cheerfully about the shooting and the scarcity of birds, and the prospects for ducks in the winter. To Framton it was all purely horrible. He made a desperate but only partially successful effort to turn the talk on to a less ghastly topic; he was conscious that his hostess was giving him only a fragment of her attention, and her eyes were constantly straying past him to the open window and the lawn beyond. It was certainly an unfortunate coincidence that he should have paid his visit on this tragic anniversary.

16 "The doctors agree in ordering me complete rest, an absence of mental excitement, and avoidance of anything in the nature of violent physical exercise," announced Framton, who labored under the tolerably widespread delusion that total strangers and chance acquaintances were hungry for the least detail of one's infirmities. "On the matter of diet they were not so much in agreement," he continued.

17 "No?" said Mrs. Sappleton, in a voice which only replaced a yawn at the last moment. Then she suddenly brightened into alert attention—but not to what Framton was saying.

18 "Here they are at last!" she cried. "Just in time for tea, and don't they look as if they were muddy up to the eyes!"

19 Framton shivered slightly and turned toward the niece with a look intended to convey sympathetic comprehension. The child was staring out through the open window with dazed horror in her eyes.

20 In the deepening twilight three figures were walking across the lawn toward the window; they all carried guns under their arms, and one of them was additionally burdened with a white coat hung over his shoulders. A tired brown spaniel kept close at their heels. Noiselessly they neared the

house, and then a hoarse voice chanted out of the dusk: "I said, Bertie, why do you bound?"

21 Framton grabbed wildly at his stick and hat; the hall door, the gravel drive, and the front gate were dimly noted stages in his headlong retreat. A cyclist from along the road had to run into the hedge to avoid imminent collision.

22 "Here we are, my dear," said the bearer of the white mackintosh coming in through the window. "Who was that who bolted out as we came up?"

23 "A most extraordinary man, a Mr. Nuttel," said Mrs. Sappleton; "could only talk about his illness, and dashed off without a word of good-by or apology when you arrived. One would think he had seen a ghost."

24 "I expect it was the spaniel," said the niece calmly; "he told me he was once hunted into a cemetery somewhere on the banks of the Ganges by a pack of pariah dogs, and had to spend the night in a newly dug grave with the creatures snarling and grinning and foaming just above him. Enough to make anyone lose his nerve."

25 Romance at short notice was her specialty.

HOW WELL DID YOU READ?

Can you read between the lines?

1. This story takes place in a
- **A** metropolitan area
- **B** rural area
- **C** suburban area

How carefully did you read?

2. Framton Nuttel was visiting Mrs. Sappleton because he
- **A** knew her husband and brothers
- **B** wanted to meet her niece
- **C** had a letter of introduction to her

3. Mr. Nuttel had taken his trip in order to
- **A** cure an illness
- **B** conduct business
- **C** hunt snipe

Why did the characters act as they did?

4. Mrs. Sappleton's niece told Mr. Nuttel about the tragedy because she wanted to
- **A** amuse him
- **B** frighten him
- **C** educate him

5. The niece can best be described as having a
- **A** vivid imagination
- **B** nasty disposition
- **C** charitable nature

6. Mr. Nuttel can best be described as
- **A** curious and talkative
- **B** intelligent and witty
- **C** self-centered and nervous

Can you draw the right conclusions?

7. The tragedy the niece described
- **A** happened many years before
- **B** happened three years before
- **C** never happened

8. The day of this story, Mrs. Sappleton's husband and brothers had been
- **A** hunting snipe in the marshes
- **B** taking the spaniel to the veterinarian
- **C** visiting the minister at the rectory

9. The French window was left open probably because the
- **A** weather was very warm
- **B** men were going to return soon
- **C** wind had blown it open

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. sharing of thoughts *(5)*
2. clergyman's house *(6)*
3. residency; occupancy *(8)*

4. game birds *(14)*
5. accidental happening of two events at the same time *(15)*
6. wrong idea or belief *(16)*
7. physical ailments or illnesses *(16)*
8. rubber raincoat *(22)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Write the letter that stands before the correct meaning.

9. division *(4)*
   - **A** army unit
   - **B** part of a group
   - **C** difference of opinion

10. indicating *(11)*
   - **A** pointing out
   - **B** giving a sign of
   - **C** expressing briefly

11. feeling *(12)*
   - **A** forewarning
   - **B** opinion
   - **C** sense of touch

12. convey *(19)*
   - **A** transmit
   - **B** communicate
   - **C** transport

13. bolted *(22)*
   - **A** locked together
   - **B** swallowed without having chewed
   - **C** ran quickly

C. *re* (again)
un (not)
im (not)

A knowledge of these **prefixes** will provide you with a key to the meaning of many unfamiliar words. Some words that have these prefixes are

*re*read = read again
*un*just = not just
*im*perfect = not perfect

Directions: The words in column II have the prefix *re-*, *un-*, or *im-*. Write the word that matches each definition in column I and underline the prefix.

I	II
14. plain	ungrateful
15. not clean	unfathomed
16. not measured; very deep	undecorated
17. come back	impolite
18. not thankful	impure
19. bounce back	return
20. not polite	rebound

D. Sometimes *re-*, *un-*, and *im-* are **not prefixes**—they do not join with a base word to change its meaning. In the words *rest*, *unit*, and *imp*, *re-*, *un-*, and *im-* are not prefixes.

Directions: All the words listed begin with *re-*, *un-*, or *im-*. If the beginning is a prefix, write **P**. If it is not a prefix, write **N**.

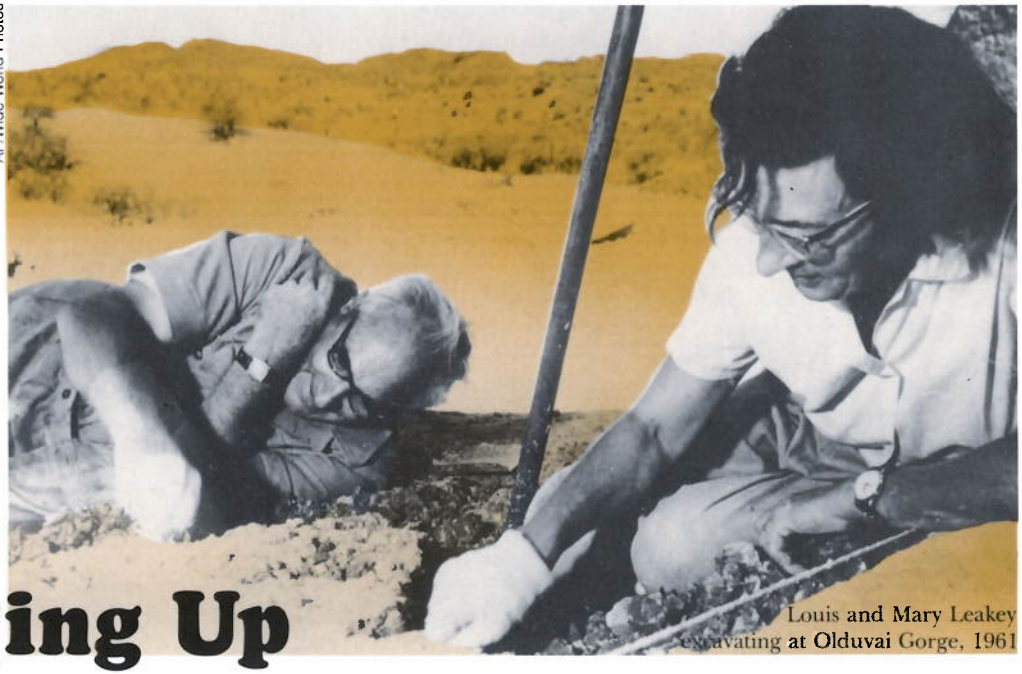
21. unity
22. restful
23. uneasy
24. impersonal
25. regain
26. imitate

E. Many words are built on **base words** that you know well.

check — unchecked, checker, checking

Directions: All but one of the words in each line are built on the same base word. Find the wrong word and write it.

27. wild, wilderness, willingness, wildwood
28. hard, chard, hardness, harder
29. quality, equal, sequel, qualify
30. admire, admiration, admiring, admit
31. excuse, custodian, excusable, excused
32. sender, sending, sentry, sent
33. timid, time, timed, timing



AP/Wide World Photos

Louis and Mary Leakey excavating at Olduvai Gorge, 1961

by Lisa Yount

Digging Up the Past

1 The barren East African plain must have looked as bleak and gray as a landscape on the moon. Every now and again a nearby volcano showered it with smoke and ash. The fresh ash was soon pocked with raindrops, for the rainy season was beginning.

2 Giraffes, elephants, birds, and other animals left their footprints in the damp ash. But two sets of tracks were not like any of the other animal tracks. The creatures that made them walked on two legs, not four. The footprints looked remarkably like those of modern human beings.

3 Why remarkably? Because the footprints were made over three and a half million years before—long before the ancestors of human beings had been thought to walk upright.

4 An equally remarkable woman named Mary Leakey has pieced together the footprints' story. She says they are the most important find she has made in her fifty years as an archaeologist (a scientist who studies past human societies through the tools and other things they left behind them).

5 The footprints were found at Laetoli, in the East African country of Tanzania, in 1976, but Mary Leakey first saw Laetoli long before that. She visited the area in 1935 when she came to Africa to work with her husband, Louis Leakey, also an archaeologist.

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6 Mary and Louis Leakey began their work at Olduvai Gorge, about 30 miles from Laetoli. The sides of this gorge offer a remarkable slice through prehistory. Hundreds of thousands of years ago, much of this land was covered by a lake. Animals, including humanlike creatures that may have been the ancestors of modern humans, lived by the lake shore. Sometimes the lake flooded, forcing the hominids to flee. In their exodus they left behind stone tools, the bones of animals they had eaten, and, sometimes, the bodies of dead family members. Sand and silt soon covered these remains.

7 This happened over and over again as the centuries passed. Layer upon layer of silt piled up, burying one camp after another. The silt slowly evolved into rock. Then, two million or more years ago, earthquakes shook the land, splitting open the African continent and creating a great rift, of which Olduvai is but a small part. As time went on, wind and rain eroded the walls of the new valley. They left the layers of sediment showing as clearly as the layers in a cake.

8 Buried in these layers were the bones and stones that the Leakeys came to seek. The stones, shaped to sharp points, showed that the hominids who lived by the lake had known how to make hand axes and other tools. The bones of the creatures themselves, along with those of animals that had lived nearby, had now turned to stone, becoming fossils.

9 The Leakeys found so many important fossils at Olduvai and in other parts of East Africa that scientists began to joke about "Leakey's luck." In fact a good portion of the luck seemed to belong to Mary, for she made many of the most significant discoveries.

10 Mary's most exciting early discovery came in 1959. She was working alone at Olduvai one day when Louis was sick. Suddenly she spotted a piece of bone in a rock slide. She was sure it was part of a skull. She looked a little higher and spotted another piece: two big teeth still embedded in part of a jaw. To Mary's experienced eye, the teeth were clearly hominid. She walked back to camp with great alacrity to tell Louis.

11 The skull, with its heavy jaw and huge teeth, was nicknamed "Nutcracker Man" by the media. Tests showed that Nutcracker Man had lived more than 1.75 million years ago. Louis dubbed the fossil "The Earliest Man." Later, however, this claim was superseded by the conclusion that this kind of hominid, although it made tools, was not a direct ancestor of human beings.

12 After the finding of Nutcracker Man, Louis Leakey began to spend much of his time traveling and speaking about the Leakeys' work. When Louis died in 1972, Mary found herself completely on her own. Now she, too, began to speak to people about her work. It was hard at first, but it had its rewards. For the first time her scientific reputation became commensurate with the work she had done.

13 Mary moved her camp to Laetoli in 1974. Two years later, while relaxing from their work by playing a game of tag, two helpers found the first of the animal footprints made so long ago in the volcanic ash. As more and more of the ash layer was explored, the hominid footprints became visible.

14 Mary and her co-workers have been able to venture some good guesses about the source of the footprints. Three hominids of different sizes made the footprints, she says. Judging from the size of the footprints, the middle hominid was about four feet eight inches tall and the smallest about four feet. The height of the tallest cannot be estimated, since no complete footprints are preserved. They may have been a father, mother, and child traveling together or they may have crossed the plain separately.

15 These precursors of humankind, Leakey feels, were not yet much like modern humans. They probably could not make tools; nor did they probably wear clothes or know how to use fire.

AP/Wide World Photos

Nutcracker Man

They ate plants rather than hunt for food. But they were like humans in one very important sense: they walked in a way that left their hands free. No ape or other animal does that. The freed hands could be used for carrying, toolmaking, or other purposes. Mary Leakey and other scientists believe that these beings' bipedalism set them or creatures related to them on the path that ended in the development of true human beings. The footprints at Laetoli show that this path began much earlier than anyone had dreamed.

HOW WELL DID YOU READ?

How carefully did you read?

1. **Mary Leakey considers her most important discovery to be**
   - **A** the bones of Nutcracker Man
   - **B** the footprints in the ash
   - **C** Olduvai Gorge

2. **The Leakeys made their discoveries in**
   - **A** East Africa
   - **B** West Africa
   - **C** South Africa

3. **Mary Leakey guessed the sizes of two of the hominids at Laetoli by**
   - **A** studying imprints of their fallen bodies in the volcanic ash
   - **B** testing the composition of their bones
   - **C** measuring their footprints

4. **The great rift on the African continent was caused by**
   - **A** a hurricane
   - **B** a volcanic eruption
   - **C** an earthquake

Did you understand what happened?

5. **Which of these did Mary gain only after the death of Louis?**
   - **A** The freedom to dig where and when she chose
   - **B** A reputation as a fine scientist
   - **C** The money to live well

Can you draw the right conclusion?

6. **From information in the story, we know that Olduvai is a**
   - **A** mountaintop
   - **B** valley
   - **C** plain

Can you compare and contrast?

7. **An important difference between the Laetoli hominids and Nutcracker Man is that**
   - **A** only the Laetoli hominids walked upright
   - **B** only Nutcracker Man ate vegetables
   - **C** only Nutcracker Man knew how to make tools

8. **A comparison of the Laetoli footprints and the Nutcracker Man skull would show that**
   - **A** the Laetoli footprints are much older
   - **B** Nutcracker Man's skull is much older
   - **C** they are about the same age

What was the author's point of view?

9. **The author would probably agree that**
   - **A** some hominids very likely were the ancestors of true human beings
   - **B** hominids could not have been the ancestors of true human beings
   - **C** nothing is known about the ancestors of true human beings

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. a time before written history *(6)*
2. humanlike beings *(6)*
3. changed; developed *(7)*
4. speed; haste *(10)*
5. replaced; succeeded *(11)*
6. equal in extent *(12)*
7. forerunners *(15)*
8. ability to walk on two legs *(15)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Write the letter that stands before the correct meaning.

9. bleak *(1)*
- **A** exposed; windswept
- **B** lacking in kindness
- **C** hopeless; depressing

10. passed *(7)*
- **A** refused a turn
- **B** was approved
- **C** went by; moved past

11. rift *(7)*
- **A** break in a land formation
- **B** shallow area in a waterway
- **C** split in friendly relations

12. points *(8)*
- **A** main parts; ideas
- **B** particular places; localities
- **C** tips; fine, sharp ends

13. claim *(11)*
- **A** right; title
- **B** statement of fact
- **C** tract of land

C. test / ed mind / ed fin / ished washed

When *-ed* is added to a word that ends in a *t* or *d* sound, the *-ed* is a separate **syllable.** When *-ed* is added to a word that does not end in a *t* or *d* sound, *-ed* is not a separate syllable.

Directions: Write each word. Draw a line between the syllables.

14. bolted

15. waited

16. waded

17. parted

18. gushed

19. posted

20. halted

D. Synonyms are words that have the same or similar meanings. The words *happiness* and *joy* are synonyms because they mean the same thing or nearly the same thing.

Directions: There are three words in each line. Two of the words are synonyms. Write the word that is not a synonym.

21. collecting, gathering, driving

22. sorts, colors, kinds

23. dry, damp, moist

24. answer, solution, simple

25. roundest, widest, broadest

26. rarely, seldom, never

E. Homonyms are words that sound alike but have different meanings and, usually, different spellings.

Directions: Read each sentence and the homonyms in parentheses. Write the homonym that is correct in the sentence.

27. The river washed a (bolder, boulder) downstream.

28. On the envelope there was a bit of (sealing, ceiling) wax.

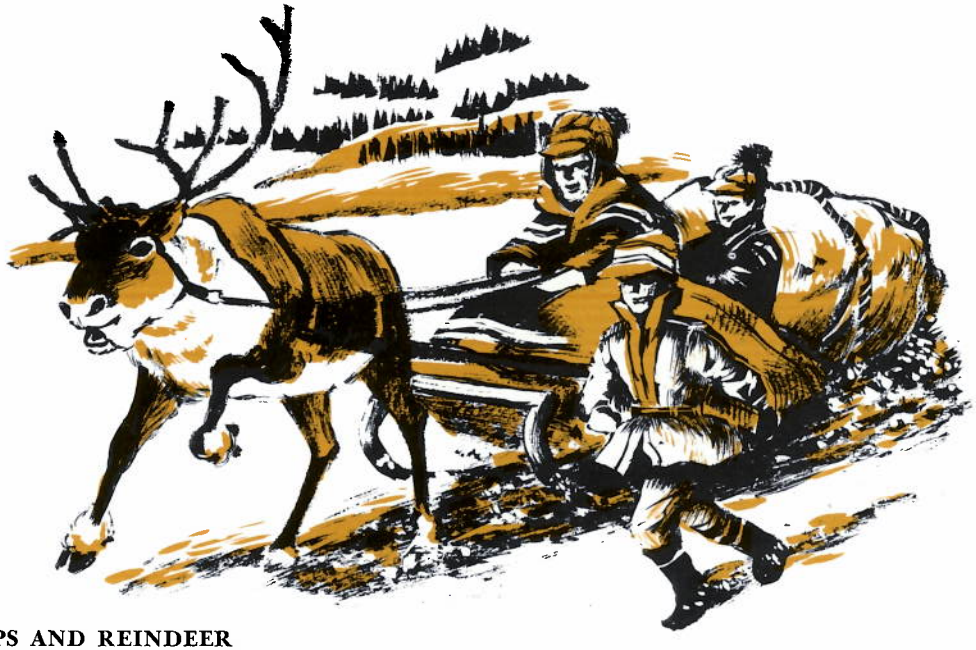
29. The fire started in the disposal (chute, shoot).

30. Could he (cite, sight, site) any good reasons?

31. A (corps, core) is a specialized branch of the armed services.

32. The air was filled with the (cent, scent, sent) of lilacs.

33. Old Henry fastened the rowboat to the (pier, peer).



THE LAND OF LAPPS AND REINDEER

NORTH OF THE ARCTIC CIRCLE

by Erick Berry

1 The land of the Lapps stretches eastward from Finland into Russia, and westward across the top of Sweden into Norway. In this interesting corner of the world, the Lapps follow a way of life that was old and traditional long before any of these four countries existed.

2 The origin of the Lapps and their strange Stone Age culture is lost to history. It is known only that they came from Asia many centuries ago and that they were driven north by the Finns.

3 But even before the Lapps moved into their wild northland there were reindeer grazing there. The Lapps are completely dependent on these reindeer, and the deer in turn are dependent on sparse reindeer moss that makes up almost all their diet. Where the reindeer go to graze, the Lapps must follow, year after year; settled villages are almost unusable except for brief periods during the dark winter months. A family of five needs two thousand deer for the bare necessities of life; and such a herd may need up to two hundred square miles of grazing land.

4 The Lapps, who call themselves Samieds, are short—hardly more than five feet tall—and have pleasant, alert features. They are sturdy and courageous; only the fittest survive their rugged life, which is as specialized, as untouched by modern civilization as any on earth.

From The Land and People of Finland, *by Erick Berry. Copyright © 1979, 1959 by Allena Champlin Best. Reprinted by permission of Harper & Row, Publishers, Inc.*

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5 As hardy as their masters are the reindeer that roam the frozen wasteland. Both male and female have horns—great branching antlers which they shed once a year. These, along with the reindeers' shovellike hoofs, are most useful for digging through deep snow to the moss beneath. A deer can sniff the moss through a three-foot fall of snow, and can shovel through to reach it. During the winter, when the deer cluster round the winter cabins of the Lapps, they plow pathways in the snow so deep that only the tips of their horns can be seen.

6 As the snow begins to melt in the spring, the winter Lapp village is a busy place, for as soon as the crust forms on the snow the deer will be off on their annual stampede to the high mountain meadows. There the does will bear calves. And there the whole herd will be rid at last of the insects that, with the warmer weather, annoy them constantly. In the turf-and-log houses blankets are rolled, the oval birchbark boxes are packed, and household pots and pans are made ready. The sleds, ready to hitch, stand beside the doors. Reindeer, selected and trained for strength and gentleness, are rounded up and confined in the corral; they will be used for carrying packs and pulling sleds.

7 Suddenly one morning the night's frost has formed a crust on the snow: the deer are off, and the herders race breathlessly behind them. With wild yells and much barking of dogs, the men channel the herd, which may string out for all of ten miles. Behind them, amid a flurry of snow and the jangle of bells, come the women and children in the lurching, bumping reindeer sleds. Here too it is a game of follow-the-leader, for the animal at the leading sled is trained and old and wise, the strongest deer of the herd. He wears a bell on his bright red-and-yellow collar; a single rein attached to the base of his horn leads back to the small, canoe-shaped wooden sled. He is guided by the rein, and the sled is partly steered by the driver's heavily booted feet dragging in the snow. Behind the leader follow the other migrants: children on deer back and older folk in sleds. Each deer is fastened to the sled or the deer ahead.

8 There is little rest on this trip northward—perhaps a half hour halt for a small fire and coffee—for now that the herd has started, there is no stopping them. The herdsmen on skis, each with a dog or two at his heels, keep the reindeer together.

9 The mountain meadows are reached—the camping place of many summers before, with hearthstones waiting as they have for generations. The herds, insect free, spread out to graze. Here at last is the true mountain country for which the Lapps, as well as their deer, have yearned all winter.

10 The camp is quickly set up; it is made up of a small group of *kata,* large wigwamlike tents erected around the permanent hearthstones. The poles, brought here to this treeless country on deer back, fit closely together. Around them are hitched two long cloths of sacking; a third covers the entrance. Beside the hearthstone are neatly arranged the few simple cookpots and the copper kettle for making salted coffee, which the Lapp drinks in quantities.

11 The main food is reindeer meat, made into stew with potatoes and barley meal. All cooking is done over an open fire. Cakes of barley meal are half baked on the hot stones, then turned to toast in the glow of the fire. Berries, and cheese made from reindeer milk, add variety to the simple diet. Reindeer milk is rarely used in coffee, for the deer are difficult to milk; besides, the calves need it more than the humans do.

12 Through the short summer, the reindeer browse day and night; life moves slowly. But as time goes on, there is increasing darkness, the sun sinking for longer and longer periods below the horizon. This is a warning that the herds must be rounded up and strays from other herds sorted out. With autumn come heavy snows and

high winds; then one morning the crust has formed, and it is time to travel south again.

13 The Laplanders' home is harsh, bitter country; its inhabitants, like gypsies, must be ever on the move. They learn no arts, practice no crafts, grow hardly any crops. They take their orders from the reindeer, as the reindeer take orders from the moss, and the moss from the climate. Few but the hardy Laplanders could accept such grim conditions—and meet them so successfully.

HOW WELL DID YOU READ?

Do you remember the time order?

1. **Reindeer probably began making their annual trips**
   - **A** before the Lapps came to the northland
   - **B** when the Lapp culture originated
   - **C** after the Lapps were driven north

2. **The reindeer herd begins to move when the snow has**
   - **A** melted completely
   - **B** begun to fall
   - **C** formed a hard crust

3. **The Lapps leave their cabins in**
   - **A** winter
   - **B** spring
   - **C** fall

How carefully did you read?

4. **The strongest deer of the herd is used to**
   - **A** start the stampede
   - **B** round up strays
   - **C** pull the lead sled

5. **The trip northward is hectic because the villagers**
   - **A** drive their herds as fast as possible
   - **B** must keep up with their herds
   - **C** often cannot keep the herd together

6. **To their mountain camps the Lapps must carry**
   - **A** tent poles
   - **B** hearthstones
   - **C** most of their food

7. **In the mountains the reindeer**
   - **A** bear their young
   - **B** suffer from insects
   - **C** struggle for food

Do you remember why?

8. **Reindeer milk is rarely used for coffee because the reindeer**
   - **A** do not give much milk
   - **B** give poor-quality milk
   - **C** are difficult to milk

Did you grasp the central idea?

9. **In order to survive in their harsh land, the Lapps must be**
   - **A** quick to learn and change
   - **B** ambitious and strong willed
   - **C** skillful at following old ways

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by reading the words around it. This is called getting the meaning from context.

Directions: Find the word in the paragraph that means

1. customary *(1)*
2. thinly spread *(3)*
3. strong; robust *(5)*
4. gather in a bunch *(5)*
5. occurring every year *(6)*
6. longed *(9)*
7. graze *(12)*
8. skilled jobs *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Read the three meanings for each word. Look back to the paragraph to see how the word is used in the story. Write the letter that stands before the correct meaning.

9. bare *(3)*
- **A** revealed
- **B** empty
- **C** mere

10. features *(4)*
- **A** traits; characteristics
- **B** facial appearances
- **C** special attractions

11. bear *(6)*
- **A** carry
- **B** tolerate
- **C** give birth to

12. covers *(10)*
- **A** hides
- **B** extends over
- **C** deals with

13. crops *(13)*
- **A** whips
- **B** cuts
- **C** food plants

C.

oi — oy	ie — ei
ou — ow	eu — ew
au — aw	

These letter combinations are often pronounced together in a special sound. Then they cannot be separated when words are divided into **syllables.**

Directions: Write each word and draw a line between the syllables.

14. coward
15. toiler
16. cloudless
17. clawing
18. conceive
19. bounty
20. pneumatic

D. The **prefixes** *de-* and *ex-* have many meanings.

de = away; from; down; off; very; wholly; reverse of; undo

ex = out; out of; forth; from; beyond; away; from upward; without

Directions: Add either *de-* or *ex-* to each word part to make a word that will fit the definition given. Write the whole word.

21. __pression (low spirits)
22. __tend (reach beyond)
23. __part (go away)
24. __fer (put off)
25. __clude (keep out)
26. __ception (something outside the rule)

E. Often two words are joined together to form one word. Words made in this way are called **compound words.**

paint + brush = paintbrush

Directions: Make each word in column I into a compound word by joining it with a word in column II. Write the compound word.

I	II
27. spear	ache
28. tooth	book
29. tree	coast
30. boat	light
31. lime	load
32. note	top
33. sea	head

If you enjoyed reading the Gold Power Builders,
you might also enjoy the following Literature Selections:

10. *The Blind Man*
11. *Lost at C*
12. *Hook*

1

AP/Wide World Photos

THE COLD AND THE DEEP:

Ama Divers of the East

1 Toshiko shivers in the early morning cold, as she lights the small stove on her boat. Her husband rows the boat across the ocean's surface, toward the rising sun. Toshiko's workday has not yet begun; soon she will slip into the water for a series of free dives to the ocean floor. She will remain on the bottom for perhaps a minute during each of about fifty separate dives, locating shellfish, such as abalone, which she will bring to the surface and toss into her boat.

2 Toshiko is an *ama* (äm′-ä), one of about 9,000 Japanese women who harvest shellfish and seaweed from the ocean waters around the Japanese islands. The occupation is over 3,000 years old.

3 Toshiko is a diver on the island of Hekura. She is one of the *funado,* or "ship people," an ama who regularly descends to depths of between sixty and seventy-five feet. She works with her husband from their boat. Holding onto a weighted descent line, she dives while he watches for currents, sharks, and other perils. When she is ready to surface, she tugs on a safety line fastened around her. He pulls her to the surface, stows her harvested shellfish, and pulls up the weighted descent line to prepare for the next dive. Because the work of the funado is so hazardous, most ama entrust their boats and their lives only to close relatives such as husbands, brothers, or fathers. As another safety measure, the divers go out in large groups, remaining close enough to each other to offer or receive help if required.

4 Two conditions of the ocean environment make the ama's work dangerous: water pressure and cold.

5 Almost everyone has had the experience of hearing a clicking noise or feeling slight ear discomfort while rising or descending quickly in an elevator. The discomfort comes from a rapid change in pressure. In the ele-

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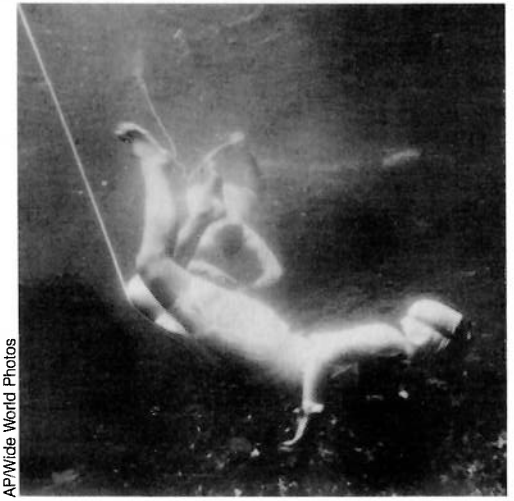
vator, air pressure increases as you descend; there is more and more air above you and around you, pressing in on you as you travel to ground level. In the ocean, the pressure comes from seawater, and the increase is much greater. At a depth of thirty-three feet, the pressure on the human body is twice that of air pressure at the surface.

6 In both cases, air pressure on the eardrum must equal the air pressure inside the Eustachian tube, a long canal that connects the delicate hearing mechanism of the inner ear to the throat. Without this equalizing of pressure, there is pain. In the elevator the pain is minor, annoying. Underwater, it becomes a condition called "ear squeeze," and the pain can be excruciating. The ama live with ear pain, becoming inured to it after a while. Many suffer ear problems and loss of hearing.

7 A similar problem is "eye squeeze." In the past, the ama could dive without eye protection because the abalone and other shellfish they sought were abundant in shallow waters. Good vision was not necessary. However, as the number of shellfish near shore dwindled, the divers had to see what they were doing. They wore goggles—metal eyecups with glass lenses. The increasing water pressure during a dive shoved the eyecups deep into the divers' eye sockets, making their eyes bulge and causing pain. To solve the problem, divers attached a rubber or catskin bulb to each eyecup. During a dive, the pressure of the water forced the air inside each bulb into the eyecup to which it was attached, equalizing the pressure. Goggles are still used by some ama, although many now use face masks that cover both nose and eyes. The pressure in such a face mask is equalized when the diver exhales through her nose as the pressure builds.



AP/Wide World Photos

8 To prepare for a dive, an ama hyperventilates, breathing slowly and deeply until her body is flooded with oxygen. Some of the air is expended during the time spent searching along the bottom for shellfish. The rest must be exhaled at a steady rate to equalize the pressure inside the lungs and other body tissues as the diver rises. If it is not, the pressure of excess air will tear the lungs and bubbles of air will enter the bloodstream. A condition called air embolism follows, as bubbles obstruct the flow of blood. A diver can be crippled for life or killed by air embolism.

9 Decompression sickness is another danger faced by divers. The major component of the air we breathe is nitrogen, an odorless and colorless gas. During a dive, some of this nitrogen is forced into body tissues. Normal breathing on the surface gets rid of excess nitrogen. Ama must rest for several hours between periods of diving to eliminate it. Otherwise, their bodies accumulate the gas. As in air embolism, injury occurs on ascent. Nitrogen bubbles form in the blood as the diver rises, impeding blood flow. The diver feels pain in the joints, and then loses muscular control. These symptoms may be followed by unconsciousness and death.

10 Ama must avoid hypothermia, a debilitating and occasionally fatal chilling of the body caused by immersion in cold water; if body temperature falls below 96°F., death may follow. It is this hazard that makes ama diving almost exclusively an occupation of women. Women have a layer of subcutaneous fat to hold in body heat. Some ama wear wet suits like scuba divers. These formfitting rubber suits are spongy, soaking up the seawater that surrounds them. The water in the rubber is warmed by its contact with the diver's body and, thus, provides a thick layer of warmed insulation against the colder seawater.

11 As the best protection against hypothermia, divers keep their diving periods short. Most dive for two hours in the morning and then, following a two-hour break, for two more hours in the afternoon. Before and after dives, they warm themselves near driftwood fires on the rocky coasts or at stoves aboard their boats.

12 The risks of diving are great. The occupation is physically demanding and requires courage and endurance. Partly because the occupation is so dangerous and difficult, the ama are fewer in number than in the past. Yet the ama still harvest the sea, living in large groups in coastal towns; they're following a tradition handed down for thousands of years, a legacy of many generations of women who have harvested the bounty of the sea by braving the cold and the deep.

HOW WELL DID YOU READ?

Do you remember the main facts?

1. **How many hours do the ama dive each day?**
   - **A** Two
   - **B** Four
   - **C** Six

2. **To ensure their safety, the ama**
   - **A** dive in close proximity to one another
   - **B** use only close relatives as helpers
   - **C** both **A** and **B**

3. **Air embolism occurs when**
   - **A** bubbles obstruct the diver's flow of blood
   - **B** bubbles get trapped in the diver's face mask
   - **C** bubbles collect near the diver's retinas

How carefully did you read?

4. **Divers experience "ear squeeze" when the water pressure on the eardrum is greater than the air pressure in the**
   - **A** lungs
   - **B** Eustachian tube
   - **C** esophagus

5. **In diving, two lines are used—**
   - **A** one during both descent and ascent, the other as a backup in case the main line breaks
   - **B** one during the descent, the other during the ascent
   - **C** one during the ascent, the other to pull up the diver's catch

6. **The primary causes of injury to the ama are probably**
   - **A** shark attacks and boating mishaps
   - **B** equipment malfunction and carelessness
   - **C** water pressure and cold temperatures

Can you draw the right conclusions?

7. **Toshika was introduced into the article most likely**
   - **A** in order to describe an outstanding diver
   - **B** as a vehicle for presenting the article's subject matter
   - **C** in order to provide biographical material on an ama

8. **Most ama take a noontime break primarily to**
   - **A** warm up and get rid of excess nitrogen
   - **B** cook lunch for themselves and the boatman
   - **C** weigh, count, and clean their catch

9. **An ama undoubtedly needs to be**
   - **A** adventuresome, intense, and restless
   - **B** brave, healthy, and unexcitable
   - **C** timid, strong, and plump

10. **The author's purpose in writing the article was most likely to**
    - **A** prove that women are better divers than men
    - **B** show that technology is important to professional divers
    - **C** explain the hazards of free diving

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. confer trust; surrender one's confidence *(3)*
2. lack of ease; distress *(5)*
3. accepting of; accustomed to *(6)*
4. used up *(8)*
5. part; element *(9)*
6. blocking; hindering *(9)*
7. lying beneath the skin *(10)*
8. something received from an earlier time *(12)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

9. slight *(5)*
- **A** slim
- **B** trivial
- **C** flimsy

10. minor *(6)*
- **A** fewer in number
- **B** lesser in rank or stature
- **C** not especially serious

11. faced *(9)*
- **A** met firmly and without evasion
- **B** covered on the front
- **C** turned in a specific direction

12. occupation *(10)*
- **A** a job or line of work
- **B** an activity that occupies one's time
- **C** the taking and holding of a country by military force

13. short *(11)*
- **A** brief
- **B** not tall
- **C** insufficient

C. The **suffixes** *-ity* and *-ty* add the meaning "quality," "condition," or "state of" to the base words with which they are combined.

Directions: The words in column II have the suffix *-ity* or *-ty*. Write the word that best fits each definition in column I.

I	II
14. quality of being faithful	unity
15. condition of being lawful	velocity
16. quality of being clear	reality
17. state of being poor	beauty
18. quality of being majestic	poverty
19. state of being united	legality
20. state of being beautiful	clarity
21. quality of speed	majesty
22. quality of being true to life	loyalty

D. Homonyms are words that sound alike but have entirely different meanings.

Directions: Match each of these six words with its definition.

pear, pair, pare
raise, rays, raze

23. two things that go together
24. put into a higher position
25. remove the rind or skin from
26. tear down to the ground
27. soft, juicy fruit
28. beams of light

E. An **idiom** is an accepted phrase or expression that does not mean literally what it says. "He flew into a rage" does not mean that he traveled through the air. It means that he had a violent outburst of anger.

Directions: The idioms in column II are built on the word *fly*. Write the idiom that best fits each meaning in column I.

I	II
29. financially unsound; not trustworthy	fly in the face of
30. shoot or throw (at)	fly-by-night
31. defy or oppose openly	fly at
32. attack suddenly; spring at	on the fly
33. while in motion; in a hurry	let fly

2

TWO LOAVES of BREAD

by O. HENRY

1 Miss Martha Meacham kept the little bakery on the corner (the one where you go up three steps, and the bell tinkles when you open the door).

2 Miss Martha was forty, her bankbook showed a credit of two thousand dollars, and she possessed two false teeth and a sympathetic heart. Many people have married whose chances to do so were much inferior to Miss Martha's.

3 Two or three times a week she received a customer in whom she began to take an interest. He was a middle-aged man wearing spectacles and a brown beard trimmed to a careful point. He spoke English with a strong German accent. His clothes were worn and darned in places, and wrinkled and baggy in others, but he looked neat and had very good manners. He always bought two loaves of stale bread—fresh bread was five cents a loaf and stale ones were two for five. Never did he call for anything but stale bread.

4 On one occasion, Miss Martha noticed a red and brown stain on his fingers and decided that he was a struggling artist. No doubt he lived in a garret, where he painted pictures and ate stale bread and thought of the good things to eat in Miss Martha's bakery. Her sympathetic heart beat faster at the picture. In order to test her theory as to his occupation, Miss Martha brought from her room one day a painting that she had purchased at a sale and set it conspicuously against the shelves behind the bread counter. It was a Venetian scene, with a perfectly splendid marble *palazzo* and a lady in a gondola trailing her hand in the water. No artist could fail to notice it.

5 Two days afterward the customer came in again, and he did notice the picture. "You haf here a fine bicture, madame."

6 "Yes?" said Miss Martha, reveling in her own cunning while wrapping the stale loaves. "I do so admire art and paintings . . . you think it is a good picture?"

7 "Der balance," said the customer, "is not in good drawing. Der bairspective of it is not true. Goot morning, madame."

8 He took the stale bread, bowed politely, and hurried out; Miss Martha carried the picture back to her room. How gentle and kindly his eyes shone behind his spectacles! To be able to judge perspective at a glance—and to live on stale bread! But Miss Martha realized that, unfortunate though it is, genius often has to struggle before it is recognized.

9 Following that incident, the gentle-mannered artist (for so she thought of him now) would chat for a while. He continued to order the stale

Based on "Witches' Loaves" from Sixes and Sevens *by O. Henry.*

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bread—never a cake, never a pie, never one of the other delicious pastries in the showcase. He was beginning to look thinner and very discouraged. Miss Martha became concerned; her sympathetic heart ached to add some delicacy to his meager purchase, but her courage failed. She did not dare affront him, for she understood the pride of artists.

10 Miss Martha took to wearing her blue-dotted silk waist behind the counter. One day the customer came in as usual, laid his nickel on the showcase, and called for his stale loaves. While Miss Martha was reaching for them there was a great tooting and clanging, and a fire engine came lumbering past.

11 The kindly customer hurried to the door to look, as anyone will. Struck with sudden inspiration, Miss Martha seized the occasion so opportunely offered. On the bottom shelf behind the counter was a pound of fresh butter left by the dairyman minutes before. With a bread knife Miss Martha quickly made a deep slash in each of the stale loaves, inserted a generous quantity of butter, and pressed the loaves tight again. When the gentleman turned back to the counter, she was tying the paper around them as usual.

12 When he had gone, after an unusually pleasant little chat, Miss Martha smiled to herself. She was pleased with her daring and generous impulse, but her heart was fluttering in anxiety. Had she been too bold? Would he take offense? Surely he would not; there was no language of edibles, and butter was no emblem of unmaidenly forwardness.

13 For a long time that day her mind dwelt on the imagined scene when he should discover her little deception. Probably he would lay down his brushes and palette and stand by his easel with the picture he was painting—the perspective, of course, would be beyond criticism. Then he would prepare for his luncheon of dry bread and water; he would slice into the loaf—ah! Miss Martha blushed at the thought. Would he think of the hand that placed it there as he ate? Would he . . .

14 The front door bell jangled viciously, interrupting the delightful speculations. Miss Martha sighed and hurried to the front, because somebody was making a great deal of noise. Two men were standing before the showcase. One was a young man smoking a pipe (she had never seen him before), and the other was the kindly, poverty-stricken artist for whom her sympathetic heart had interceded only this morning.

15 He did not look or act like his usual self—his face was very red, his hat was on the back of his head, his hair was wildly rumpled. He clenched his fists tightly and shook them ferociously at Miss Martha. At Miss Martha!

16 *"Dummkopf!"* he shouted with extreme loudness. He made a bass drum of Miss Martha's counter. "You haf shpoilt me," he cried, his blue eyes blazing angrily behind his spectacles. "I vill tell you, you vas von meddingsome old cat!"

17 Miss Martha leaned weakly against the showcase, one hand on her best blue-dotted silk shirtwaist as the pipe-smoking stranger gripped the shouting customer by the collar.

18 "Come on, you've said enough." He dragged the irate fellow to the door, and then he turned again to Miss Martha.

19 "Guess you ought to be told, ma'am—that's Blumberger. He's an architectural draftsman in the office where I work. He's been working hard for three months drawing a plan for a new city hall. He was going to enter it in a prize competition; he finished inking in the lines yesterday. You know, a draftsman always makes his drawing in pencil first, and when it's done he rubs out the pencil lines with stale bread crumbs.

20 "Blumberger's been buying the bread here. Well, today—well, you know, ma'am, that butter isn't—well, Blumberger's plan isn't good for anything now."

21 Miss Martha Meacham went into the back room, took off the blue-dotted silk waist, and put on the old brown serge one; then she returned to sit before the counter.

HOW WELL DID YOU READ?

How well do you reason?

1. **Miss Martha's guess about her customer's occupation was**
   - **A** natural considering the evidence
   - **B** not based on fact at all
   - **C** purely objective

2. **Miss Martha was interested in her customer primarily because**
   - **A** his poverty aroused her sympathy
   - **B** he was a middle-aged man
   - **C** she had a secret love of art

3. **Blumberger became enraged with Miss Martha because she had**
   - **A** dared to show pity for him
   - **B** ruined his work
   - **C** failed to recognize his genius

What convincing details were given?

4. **The customer's comments about the painting showed that he**
   - **A** was not an artist
   - **B** knew something about drawing
   - **C** was trying to please Miss Martha

5. **The customer never bought Miss Martha's pastries because of**
   - **A** his poverty
   - **B** his great dislike of Miss Martha
   - **C** some reason not explained

How did the author construct his story?

6. **The author expects the reader to**
   - **A** see the events of the story through Miss Martha's eyes
   - **B** make independent guesses about the facts
   - **C** know what the outcome will be

7. **The surprise that the ending holds for the reader is**
   - **A** the fact that the customer is not an artist
   - **B** the way in which the bread was used
   - **C** Miss Martha's reaction when she learned the facts

8. **The author uses Miss Martha's blue-dotted silk waist as a symbol for**
   - **A** her wish to draw romantic attention
   - **B** the routine nature of her work
   - **C** the prosperity of her bakery shop

Can you draw the right inferences?

9. **In his normal day-to-day life, Blumberger was probably**
   - **A** very gentle and kind
   - **B** always bad-tempered and rude
   - **C** quite unremarkable

10. **Miss Martha needed to learn that**
    - **A** good intentions usually backfire
    - **B** one cannot judge people by appearances
    - **C** one should not twist facts to suit oneself

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. less good *(2)*
2. making great efforts *(4)*
3. attic *(4)*
4. cleverness *(6)*
5. poor; inadequate *(9)*
6. moving clumsily *(10)*
7. opportunity *(11)*
8. thoughts; meditations *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

9. kept *(1)*
   - **A** fulfilled
   - **B** managed
   - **C** detained

10. true *(7)*
    - **A** accurate
    - **B** loyal
    - **C** lawful

11. delicacy *(9)*
    - **A** weakness; frailty
    - **B** sensitivity
    - **C** choice food

12. bold *(12)*
    - **A** fearless
    - **B** striking; sharp
    - **C** shameless

13. extreme *(16)*
    - **A** farthest away
    - **B** last; final
    - **C** very great; excessive

C. *ab* (away; from; down)
per (through; throughout; by; thoroughly)

A knowledge of these **prefixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the prefix *ab-* or *per-* to complete each word so that it fits the definition. Write the word.

14. __haps (possibly; maybe; by chance)
15. __sent (not present; missing)
16. __stain (do without; refrain)
17. __fect (complete in all respects; without a flaw)
18. __mit (allow; consent to)
19. __ject (downcast; humble)
20. __sist (refuse to give up; continue firmly, insistently)
21. __olish (do away with)
22. __use (read carefully or thoroughly)

D. Antonyms are words that have opposite or nearly opposite meanings.

Directions: The words in column II are antonyms of the words in column I. Write the antonym for each word in column I.

I	II
23. careful	fresh
24. sympathetic	lucky
25. stale	heartened
26. admire	haphazard
27. politely	shy
28. unfortunate	plentiful
29. discouraged	unfeeling
30. meager	smooth
31. hurried	churlishly
32. bold	dawdled
33. rumpled	despise

3

18,000 Feet — and No Parachute

by Ian Mackersey

1 The Caterpillar Club is composed of men who have saved their lives by parachute. But even the most terrifying of their bailouts pale into insignificance in comparison with the journeys of a small band of men who, although they fell out of the sky, will never be members. They are barred from the club for a simple reason—they came down without parachutes.

2 The classic among the cases on record is that of an RAF rear gunner, Flight Sergeant Nicholas Alkemade.

3 On March 23, 1944, twenty-one-year-old Alkemade and his crew were returning from a raid on Berlin. Over Germany, shortly before midnight, their plane was caught by a German night fighter. The starboard wing was ripped open like a can of beans, and the aircraft caught fire. Alkemade saw flames pour back past his turret, and before long he heard the pilot's voice: "Sorry, boys, I can't hold her. Bail out!"

4 Alkemade opened the doors to the fuselage to get his parachute, which was in a metal container. He was too late. The fuselage interior was ablaze from end to end. In the brief seconds during which he saw his parachute pack burning, his face and wrists were scorched, and his rubber oxygen mask began to melt on his face.

5 Quickly he slid back into the turret and closed the doors. The discovery caused a hollow sensation in the pit of his stomach, but the merciless, skin-shriveling heat terrified him far more than the loss of his parachute. And now the turret, too, was burning. Far better, he decided, to die cleanly—better than a slow, frying death. With the hand control he rotated the turret, then fell out backward into the night. He had scarcely left the aircraft when in a fiery flash it exploded above him.

6 He found himself falling headfirst, rigidly at attention. It was a clear, dark night, and all

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he saw during the minute and a half of his three-and-a-half-mile descent were the stars beyond his feet. After the inferno he had escaped from, the cool night air was peacefully soothing, and he found himself thinking: If this is dying, it's not at all strange.

7 No memories of his past life flashed before him. He felt no fear, no panic. There was nothing he could do to save himself, and he knew that he would know nothing of the end when it came. He decided not to turn his head and look down; he didn't want any warning of the end.

8 And that was his last recollection of his descent—inverted in space, the stars below his flying boots, and a sensation, which persisted to the end, that he was stationary.

9 Three hours later Alkemade regained consciousness, lying on his back in snow in a small pine wood. When he opened his eyes and looked up he could see the stars through the space he had made in the trees above him.

10 To make quite sure that he was alive, he wriggled his toes and with his hands began systematically to feel himself all over. Incredibly, fantastically, apart from severe bruising, numerous small cuts and scratches, and the burns he had received in the aircraft, he was in one piece. He remembered clearly his descent without parachute, yet strangely, after his initial discovery of the fact, he felt no great surprise that he was alive. It was not until several hours later that his emotional numbness was to wear off and his senses were to grasp fully the significance of the miracle.

11 As his eyes grew accustomed to the dark, he stood up and examined himself more thoroughly. Both boots were missing, presumably torn off when he had crashed at 120 mph through the branches of the pine trees. The trouser legs of his flying suit were charred and torn, but his parachute harness was still firmly in position. Not realizing then the part it was to play in corroborating his story, he took the harness off and dropped it in the snow.

12 The snow, he saw, was no more than eighteen inches deep. It had drifted in under the trees from open ground that bordered the pine wood. Out in the open there was no snow. If he had fallen just twenty yards to one side of the wood, nothing could have saved him. And so to two simple facts he owed his life: first, the branches of the pines were young and supple; second, the snow had received him as he dropped out of the branches.

13 When he tried to walk out of the wood, one leg crumpled under him; he remembered that he had twisted it as he flipped himself out of the turret. He knew he would have to give himself up, so he pulled up the whistle hooked on his battle dress and blew a series of long blasts.

14 Soon he heard voices and the sound of crashing through the trees. A torch shone in his face, and he saw that his captors were the German home guards. They brought a tarpaulin, laid him on it, and dragged him like a sack of potatoes to a cottage. Eventually Gestapo men arrived, and he was taken by car to a hospital.

15 Next morning the interrogation began. The Germans wanted to know what had become of his parachute. When Alkemade said he had come down without one, his interrogators laughed disbelievingly and accused him of being a spy and of hiding his parachute.

16 "If you don't believe me," said Alkemade indignantly, "go and find my parachute harness."

17 In due course the harness was collected from the pine woods. And when his accusers

saw it they were partly convinced, for the lift webs which extend when a parachute opens were clipped down. A few days later, in the burnt-out wreckage of the plane, which had fallen twenty miles away, the metal remains of his parachute were found. From being a suspect spy, Alkemade became a minor hero.

18 So impressed were the Germans that when Alkemade was delivered to prison camp, the two hundred Allied prisoners there were paraded to hear a Luftwaffe officer recite the details of the incredible descent. And so that he would not be doubted again, he was given a certificate stating that his story had been investigated and corroborated by the German authorities, and that it was true in all respects. Sergeant Alkemade had made a descent from 18,000 feet without a parachute, and had made a safe landing without injury.

HOW WELL DID YOU READ?

Did you understand the reason?

1. **Alkemade cannot be a member of the Caterpillar Club because he**
   - **A** left the plane of his own free will
   - **B** does not owe his life to a parachute
   - **C** was captured by the enemy

2. **Alkemade had to jump without his parachute because**
   - **A** it was locked in the turret
   - **B** it had been destroyed
   - **C** he had forgotten to bring it

What difference did it make?

3. **If Alkemade had stayed with the plane instead of jumping, he would have**
   - **A** had a good chance to survive
   - **B** died within seconds
   - **C** met a slow, painful death

Did you grasp the main ideas?

4. **Alkemade's state of mind during the fall can best be described as**
   - **A** calm and resigned
   - **B** desperate and terrified
   - **C** determined and resourceful

5. **Alkemade's fall was broken by**
   - **A** tree branches
   - **B** drifted snow
   - **C** Both **A** and **B**

When did it happen?

6. **Alkemade regained consciousness after**
   - **A** only a few minutes
   - **B** about three hours
   - **C** more than a day

7. **Alkemade received his leg injury when he**
   - **A** jumped from the aircraft
   - **B** hit the ground
   - **C** left the woods

8. **The Germans became fully convinced of Alkemade's story when they examined**
   - **A** the wrecked plane
   - **B** his parachute harness
   - **C** his charred flying suit

What was the motive?

9. **Alkemade gave himself up to the Germans because he**
   - **A** hoped to become a spy
   - **B** wanted his story confirmed
   - **C** knew he could not escape

10. **The Germans suspected that Alkemade was a spy because he**
    - **A** landed near a prison camp
    - **B** had no parachute
    - **C** was only slightly injured

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. unimportance *(1)*
2. hot or blazing place *(6)*
3. not moving *(8)*
4. in an orderly, methodical way *(10)*
5. confirming; supporting *(11)*
6. easily bent; limber *(12)*
7. questioning *(15)*
8. hard to believe; astounding *(18)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits each word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

9. cases *(2)*
   - **A** patients
   - **B** legal actions
   - **C** examples; instances

10. seconds *(4)*
    - **A** fractions of a minute
    - **B** articles of inferior quality
    - **C** aids; assistants

11. attention *(6)*
    - **A** thoughtfulness; courtesy
    - **B** careful observation
    - **C** erect posture of soldiers

12. descent *(8)*
    - **A** ancestry
    - **B** sudden attack
    - **C** fall

13. minor *(17)*
    - **A** under legal age
    - **B** lesser
    - **C** sad; melancholy

C. Many words are built on shorter base, or root, words that you already know.

Directions: Each line below contains three words that have a root word in common. Write the root word for each set of three words.

14. retroactive, actor, react
15. aggrandize, grandeur, grandfather
16. copyright, photocopy, copyreader
17. masthead, headquarters, beheading
18. enjoy, joyousness, killjoy
19. resignation, insignificant, assignment
20. attractive, subtraction, tractor
21. deportation, exporter, portfolio
22. proverbial, adverb, verbatim

D. Synonyms are words that have the same or nearly the same meaning.

Directions: For each word in column I, find a synonym in column II and write it.

I	II
23. terrifying	memory
24. interior	stiffly
25. sensation	inside
26. rotated	feeling
27. rigidly	continued
28. recollection	frightening
29. persisted	turned
30. significance	first
31. investigated	burned
32. scorched	importance
33. initial	studied

4

Sleepwalking--FACT OR FANCY?

by Norma Lee Browning

Based on "Strange Antics of Sleepwalkers" by Norma Lee Browning, Science Digest, *1958, by permission of Hearst Magazines.*

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1 The bizarre antics of sleepwalkers have puzzled police, perplexed scientists, and fascinated writers for centuries. There is an endless supply of stories about sleepwalkers. Persons have been said to climb on steep roofs, solve mathematical problems, compose music, walk through plate-glass windows, and commit murder in their sleep.

2 How many of these stories have a basis in fact, and how many are pure fakery? No one knows, but if some of the most sensational stories should be taken with a barrel of salt, others are a matter of record.

3 In Revere, Massachusetts, a hundred policemen combed a waterfront neighborhood for a lost boy who left his home in his sleep and woke up five hours later on a strange sofa in a strange living room, with no idea how he had got there.

4 There is an early medical record of a somnambulist who wrote a novel in his sleep. And the great French writer Voltaire knew a sleepwalker who once got out of bed, dressed himself, made a polite bow, danced a minuet, and then undressed and went back to bed.

5 At the University of Iowa, a student was reported to have the habit of getting up in the middle of the night and walking three-quarters of a mile to the Iowa River. He would take a swim and then go back to his room to bed.

6 The world's champion sleepwalker was supposed to have been an Indian, Pandit Ramrakha, who walked sixteen miles along a dangerous road without realizing that he had left his bed. Second in line for the title is probably either a Vienna housewife or a British farmer. The woman did all her shopping on busy streets in her sleep. The farmer, in his sleep, visited a veterinarian miles away to ask him to come and look at a sick cow.

7 A leading expert on sleep in America claims that he has never seen a sleepwalker. He is Dr.

Nathaniel Kleitman, a noted physiologist at the University of Chicago. He is said to know as much about sleep as any other living person, and during the last fifty-nine years has lost a lot of sleep watching people sleep. Says he, "Of course, I know that there are sleepwalkers because I have read about them in the newspapers. But none of my sleepers ever walked, and if I were to advertise for sleepwalkers for an experiment, I doubt that I'd get many takers."

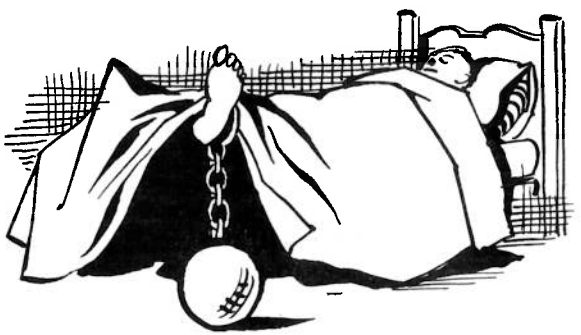
8 Sleepwalking, nevertheless, is a scientific reality. Like hypnosis, it is one of those dramatic, eerie, awe-inspiring phenomena that sometimes border on the fantastic. It lends itself to controversy and misconceptions. What is certain about sleepwalking is that it is a symptom of emotional disturbance, and that the only way to cure it is to remove the worries and anxieties that cause it. Doctors say that somnambulism is much more common than is generally supposed. Some have estimated that there are four million somnambulists in the United States. Others set the figure even higher. Many sleepwalkers do not seek help and so are never put on record, which means that an accurate count can never be made.

9 The simplest explanation of sleepwalking is that it is the acting out of a vivid dream. The dream usually comes from guilt, worry, nervousness, or some other emotional conflict. The classic sleepwalker is Shakespeare's Lady Macbeth. Her nightly wanderings were caused by her guilty conscience at having committed murder. Shakespeare said of her, "The eyes are open but their sense is shut."

10 The age-old question is: Is the sleepwalker actually awake or asleep? Scientists have decided that he is about half-and-half. Like Lady Macbeth, he has weighty problems on his mind. Dr. Zelda Teplitz, who made a ten-year study of the subject, says, "Some people stay awake all night worrying about their problems. The sleepwalker thrashes them out in his sleep. He is awake in the muscular area, partially asleep in the sensory area." In other words, a person can walk in his sleep, move around, and do other things, but he does not think about what he is doing.

11 There are many myths about sleepwalkers. One of the most common is the idea that it's dangerous or even fatal to waken a sleepwalker abruptly. Experts say that the shock suffered by a sleepwalker suddenly awakened is no greater than that suffered in waking up to the noise of an alarm clock. Another mistaken belief is that sleepwalkers are immune to injury. Actually most sleepwalkers trip over rugs or bump their heads on doors at some time or other.

12 What are the chances of a sleepwalker committing a murder or doing something else extraordinary while asleep? Some cases of this have been reported, but they very rarely happen. Of course the few cases that are reported receive a great deal of publicity. Dr. Teplitz says, "Most people have such great inhibitions against murder or violence that they would awaken—if someone didn't waken them." In general, authorities on sleepwalking agree with her. They think that people will not do anything in their sleep that is against their own moral code. As for the publicized cases, Dr. Teplitz points out, "Sleepwalking itself is dramatic . . . sleepwalkers can always find an audience. I think that some of their tall tales get exaggerated in the telling." In her own file of case histories, there is not one sleepwalker who ever got beyond his own front door.



13 Parents often explain their children's—or their own—nocturnal oddities as sleepwalking. Sleepwalking is used as an excuse for all kinds of irrational behavior. There is a case on record of a woman who dreamed that her house was on fire and flung her baby out of the window. Dr. Teplitz believes that this instance of irrational behavior was not due to somnambulism. She believes the woman was seriously deranged or insane, not a sleepwalker.

14 For their own protection, chronic sleepwalkers have been known to tie themselves in bed, lock their doors, hide the keys, bolt the window, and rig up all sorts of gadgets to wake themselves if they should get out of bed. Curiously enough, they have an uncanny way of avoiding their own traps when they sleepwalk, so none of their tricks seem to work very well. Some sleepwalkers talk in their sleep loudly enough to wake someone else in the family who can then shake them back to their senses.

15 Children who walk in their sleep usually outgrow the habit. In many adults, too, the condition is more or less temporary. If it happens often, however, the sleepwalker should seek help. Although sleepwalking itself is nothing to become alarmed about, the problems that cause the sleepwalking may be very serious.

HOW WELL DID YOU READ?

Did you understand what was said?

1. **"The eyes are open but their sense is shut" means that the eyes**
   - **A** see only what the mind wants to see
   - **B** are awake but the body is asleep
   - **C** are looking but not seeing

2. **Dr. Kleitman's statement implies he believes**
   - **A** there are no true sleepwalkers
   - **B** sleepwalking is rarer than is supposed
   - **C** sleepwalkers are too embarrassed about their condition to seek help

Did you note the important facts?

3. **Sleepwalking is caused by**
   - **A** insanity
   - **B** emotional conflict
   - **C** restlessness

4. **The idea that waking a sleepwalker is dangerous or even fatal is**
   - **A** a fallacy
   - **B** correct in most cases
   - **C** sometimes correct

5. **When it occurs in children, sleepwalking is usually**
   - **A** chronic
   - **B** permanent
   - **C** temporary

6. **People who commit violent acts while sleepwalking are probably**
   - **A** going against their moral code
   - **B** deeply disturbed, even insane
   - **C** well aware of what they are doing

Did you understand why?

7. **The most important reason for being concerned about sleepwalking is the fact that sleepwalkers**
   - **A** can be dangerous to others
   - **B** may injure themselves
   - **C** often have serious problems

8. **Cases of sleepwalking receive great publicity because**
   - **A** sleepwalkers do dramatic things
   - **B** sleepwalking is very unusual
   - **C** sleepwalkers' stories are often exaggerated

9. **The number of somnambulists is not accurately known because**
   - **A** doctors disagree about what sleepwalking really is
   - **B** many sleepwalkers do not seek medical help
   - **C** newspaper accounts exaggerate the number of sleepwalkers

Can you evaluate the evidence?

10. **There is evidence in the article that**
    - **A** only experts can identify a sleepwalker
    - **B** most cases of sleepwalking are easily recognizable
    - **C** people do not know they are sleepwalkers

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. odd; unusual *(1)*
2. looked carefully through *(3)*
3. sleepwalker *(4)*
4. animal doctor *(6)*
5. argument; disagreement *(8)*
6. lifelike; intense *(9)*
7. pertaining to the night *(13)*
8. strangely *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

9. strange *(3)*
   - **A** unfamiliar
   - **B** outlandish
   - **C** extraordinary

10. disturbance *(8)*
   - **A** disorder
   - **B** inconvenience
   - **C** interruption

11. chances *(12)*
   - **A** opportunities
   - **B** possibilities
   - **C** gambles

12. work *(14)*
   - **A** exert oneself
   - **B** be employed
   - **C** operate effectively

13. outgrow *(15)*
   - **A** grow too large for
   - **B** lose with maturity or age
   - **C** surpass in growing

C. The **prefix** *sub-* means "under," "beneath," "below," "lower than," or "less than." It can be combined with many base words to add these meanings. It is not always easy to recognize, because its spelling often changes according to the word with which it is combined. It usually becomes

suc before *c*

suf before *f*

sug before *g*

sum before *m*

sup before *p*

sur before *r*

Directions: Decide which form of the prefix *sub-* goes with each word part below. Add the prefix and write the word.

14. __pose
15. __stance
16. __ceed
17. __focate
18. __round
19. __gest
20. __fer
21. __mon
22. __port
23. __ject

D. Antonyms are words that have opposite or nearly opposite meanings.

Directions: The words in column II are antonyms of the words in column I. Write the antonym for each word in column I.

I	II
24. fascinated	discourteous
25. difficult	bored
26. fakery	innocent
27. polite	minimized
28. dangerous	slipshod
29. generally	specifically
30. accurate	simple
31. guilty	permanent
32. exaggerated	safe
33. temporary	reality

5

by Roy L. Abbott

ABALONE SPELLS ADVENTURE

1 To most people, snail hunting sounds neither fascinating nor dangerous, but it can be both—if the quarry is the abalone. This huge, slow-moving snail is a highly prized catch for which men take great risks. Many a husky young skin diver or professional snail hunter has met with injury or death in hunting the creature.

2 The abalone (pronounced as a short *a* plus *baloney*) is a mollusk. It has a soft body protected by a shell. It is a giant among the snails of the world; a very large specimen may be eighteen inches long and half that in breadth. It glides over the surface of ocean rocks, sliding on its broad, fleshy foot, feeding as it moves. It uses its filelike tongue to scrape bits of seaweed or tiny green plants from the slippery rocks. A big abalone spends a great deal of time merely finding enough food to sustain its bulk.

3 The abalone is found in only two areas of the ocean: along the western coast of the United States, and from Japan to the Philippines. The deep, chilly waters of rocky shores apparently suit it best. There the abalone develops from an egg and goes through a sort of infancy. Like the young of all species, it has many natural enemies; it may be devoured by wide-mouthed ocean bullheads, bottom-feeding skates, or that terrible enemy of many small mollusks, the oyster drill. This tiny pest, a snail itself, crawls on top of the infant abalone, and uses its filelike tongue to drill a hole through its victim's thin shell. It then sucks out the substance of the abalone's soft body.

4 The young abalone is so vulnerable that it

Based on "Abalone: Mighty Mollusk" by Dr. Roy L. Abbott, Science Digest, *1960, by permission of Hearst Magazines.*

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is protected by California law. It may not be hunted legitimately until it has reached a length ranging between five and three-quarters and seven and three-quarters inches, depending on the species. (There are several species of abalone: red, green, pink, white, and black.) Divers usually carry a pair of calipers with which to measure abalones about whose length there is some doubt.

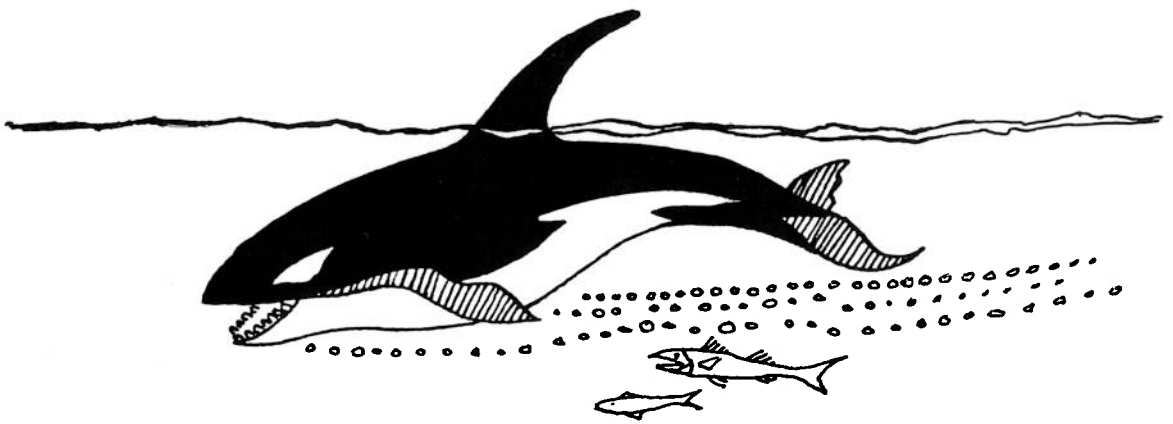
5 Once the abalone has reached a harvestable size, its shell has become so hard that the oyster drill cannot harm it, nor can any other sea creature. Besides its hard shell, the soft-bodied abalone has another protective device. It can cling to a boulder indefinitely, for its muscular foot never seems to tire, and it can always get plenty of oxygen into its gills by drawing water through the row of holes that rim its heavy shell. An abalone attached in such a manner is extremely hard to remove. Even large dredges, dragging the ocean bottom for shellfish, will slip over it without breaking its grip. Divers who go beneath the surface of the ocean to hunt the abalone usually go armed with a tire iron to pry it loose.

6 Only a foolhardy diver will try to snatch up a slow-moving abalone with bare hands. The abalone's clamping reflex may be faster. There have been stories about divers getting their fingers caught beneath a big abalone's shell and being held under water until they drowned. According to one well-known scientist, many abalone hunters carry a knife with which to cut off trapped fingers should the abalone prove to be too fast. Most stories about the dangerous nature of the abalone, however, are fictitious; in itself it is generally harmless. The great hazards to those who dive for the mighty mollusk are the sea and its other inhabitants.

7 The commercial abalone hunter usually hunts between ten and one hundred fifty feet beneath the surface. The full diver's equipment—wet suit, diving mask, weight belt, fins, and an air hose which connects from the regulator in the diver's mouth to an air tank in the boat above. Divers may work with an assistant who remains in the boat, or they may choose to work alone. Swimming along the ocean bottom through a jungle of seaweed, the diver finds abalones of legal size as rapidly as possible, flips them over with a prying iron, and tosses them into a sack. When the sack has filled, he or she hauls the catch to the surface. However, the diver in deep water must come to the surface slowly in order to allow the body to adjust to the change in pressure. A too rapid rise might be fatal.

8 A diver on the bottom must keep constant watch for ugly moray eels, stingrays, sharks, and octopuses. Why do divers risk their lives in pursuit of a mollusk? The commercial diver does it for a living; it is a difficult job, but a profitable one. Over the years, the abalone has become quite a delicacy, and snail steaks command a high price at the fish market. Nearly four hundred fifty tons of these mollusks are collected every year—an impressive figure when you consider that the commercial diver does a big day's work by bagging only thirty or forty abalones.

9 For the amateur skin diver the motives are different, the greatest fascination of abalone hunting probably lying in its challenge as a sport.



Hunting for abalone is an excellent test of diving skill, and California laws make it more difficult still by restricting the number of abalone that can be bagged per trip, enforcing size limits, and placing limitations on the type of equipment used. For some skin divers, the abalone shell is the real prize. The inside of it is marvelously colored in an amazing arrangement of red, blue, orange, and green. To those who love beauty, the abalone shell is a genuine treasure, and well worth the trouble of getting it.

10 The hunt is dangerous, but to the divers who pursue the abalone, whatever their reasons, the mighty mollusk is reward enough for the risks they take and the dangers they face.

HOW WELL DID YOU READ?

What did the writer say?

1. **A creature to be feared by the young abalone is the**
   - **A** octopus
   - **B** oyster drill
   - **C** stingray

2. **Abalone hunting is profitable because**
   - **A** a hunter can collect hundreds of abalones in a day
   - **B** abalone is a universally popular food
   - **C** abalone steak is expensive

3. **Amateur skin divers who hunt abalones are primarily interested in**
   - **A** profit
   - **B** sport
   - **C** science

4. **Being held under water by an abalone is**
   - **A** a likelihood all divers face
   - **B** the result of a foolish action
   - **C** an event that never really occurs

5. **Legal restrictions in California make abalone collecting**
   - **A** more difficult for skin divers
   - **B** safer for amateurs
   - **C** more profitable for commercial divers

What reasons were given?

6. **A full-grown abalone is safe from the oyster drill because**
   - **A** it can cling to the rocks
   - **B** it is protected by its shell
   - **C** sea creatures fear its size

7. **A killer shark is dangerous to a diver probably because**
   - **A** its approach cannot be detected
   - **B** it is large and fast
   - **C** both **A** and **B**

Can you draw the right inferences?

8. **The abalone is probably safest when it**
   - **A** is still an infant
   - **B** is just under its harvestable size
   - **C** reaches its maximum growth

9. **California laws forbid removal of small abalones in order to**
   - **A** make abalone hunting more challenging
   - **B** stimulate demand for abalone as food
   - **C** prevent abalones from becoming extinct

10. **The abalone is considered a delicacy by**
    - **A** most people who live near the ocean
    - **B** those who live where it is hunted
    - **C** anyone with a discriminating palate

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. a thing that is hunted *(1)*
2. valued; cherished *(1)*
3. one individual used as an example *(2)*
4. open to attack *(4)*
5. for an unspecified period of time *(5)*
6. not true; made up *(6)*
7. think about *(8)*
8. hunt; go after *(10)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

9. broad *(2)*
- **A** wide
- **B** tolerant
- **C** clear; open

10. sustain *(2)*
- **A** support from below
- **B** encourage
- **C** keep in existence

11. natural *(3)*
- **A** uncultivated
- **B** instinctive; by nature
- **C** realistic

12. full *(7)*
- **A** plump; round
- **B** complete
- **C** loose; flowing

13. constant *(8)*
- **A** faithful
- **B** uninterrupted
- **C** unswerving

C. *less* (without)
ness (quality of)
lessness (quality of being without)

A knowledge of these **suffixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the suffix *-ness, -less,* or *-lessness* to complete each word so that it fits the definition. Write the word.

14. hope_____ (without hope; despaired of)
15. happi_____ (quality of being joyful)
16. merci_____ (without pity)
17. law_____ (without regard for the law)
18. hope_____ (quality of being despaired of)
19. cool_____ (quality of being cool)
20. merci_____ (quality of being without pity)
21. reck_____ (without care or concern)
22. hap_____ (without good luck)

D. Homonyms are words that sound alike but have entirely different meanings.

Directions: Column II contains two sets of homonyms. Write the word that fits each definition in column I.

I	II
23. set of musical notes	boar
24. thick string or thin rope	bore
25. wild hog; male pig	chord
26. removed the center of	cored
27. dull, wearisome person	cord

E. An **idiom** is an accepted phrase or expression that does not mean literally what it says. "Change was in the air" does not mean that the air contained an alteration. It means that change was expected.

Directions: The idioms in column II are built on the word *air.* Write the idiom that best fits each meaning in column I.

I	II
28. act in an affected, superior manner	air castle
29. broadcasting or being broadcast	up in the air
30. feel very happy	give oneself airs
31. go out into the fresh air; go outdoors	walk on air
32. undecided; not settled	take the air
33. daydream	on the air

6

by Carolyn Gloeckner

NIGHTMARE

1 Joan Burchfield refused the offer politely but firmly. "Mr. Samuels, Coopersmith Productions makes training films for business and industry. We do not make music videos. I have never directed a music video."

2 Her balding, freckled visitor dismissed her objection with a brisk wave of one stubby hand. "Oh, *nothing* to it. A director is a director is a director, right? I came all the way out here to Florida to offer you this *fabulous* deal! Perpetual Night wants *you,* honey, and it'll pay big bucks."

3 Samuels pressed his case, and hours later, Joan capitulated and signed the contract, persuaded partly by the enormous sum promised as payment, partly by the unlimited expense account, and partly by the fact that shooting on her next film would not begin for two weeks.

4 During the next few days she listened to Perpetual Night's recording of *Gonna Walk (Away From You)* until she knew every word by heart. She watched hours of rock video on MTV.

5 Then the script arrived.

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6 When she finished the last page, Joan asked her secretary to find the contract she had just signed with Samuels. She read it meticulously, going over each word, each sentence, each paragraph again and again. It had been drafted in stainless steel: barring death or the collapse of civilization, she would have to direct the music video.

7 She read through the script again. Into two-and-a-half minutes of video the scriptwriter had managed to pack twelve different locations, and a cast of over seven hundred, including five llamas and forty skydivers. She had exactly a week and a half to assemble workers, shoot the film, and edit the footage.

8 She telephoned Samuels's office. He had gone to Alaska and was not expected back until the day the video was due.

9 With a resigned sigh, Joan picked up the telephone, started making calls, and by the end of the day had hired seven assistants—talented, experienced people she knew and trusted. The next morning they arrived in her office, read the script, and simultaneously quit. Joan offered them twice the going rate for their services and they agreed to work for her, provided their names were never used in connection with the project.

10 By midnight the shooting schedule had been nailed down and her assistants had hired their own assistants and crew.

11 The next day, filming began.

12 Exactly an hour into the first scheduled scene, which consisted of Night performing in a circus ring while stilt walkers circled them, the first of many catastrophes hit. A stilt walker fell on the Night drummer, breaking his nose.

13 Later the same day, on location inside the Grand Canyon, Night's lead singer became seriously ill and had to be taken to a hospital emergency room, where she spent several hours gasping and wheezing. It turned out that she was allergic to llama fur.

14 Then there was the scene in which cockroaches were to walk across a windowsill in single file. The bug man Joan hired to handle the roaches said they were erratic, tending to rush in all directions when released. They refused to participate in any kind of organized group activity.

15 Fortunately, he was acquainted with another bug man who knew an expert on cockroaches who had some footage of a group of rare Brazilian cockroaches walking along a branch. The footage was old and faded, so Joan hired animators to give it some pizzazz by coloring the roaches' wings, feelers, and legs blue and adding a window with a red-and-yellow-striped windowsill.

16 At the Great Salt Lake in Utah, seagulls repeatedly dive-bombed Night (one of the film crew said they must be music lovers) and were lured from this diversion only when the unit's production manager had a truck come out and deposit a load of fish a half-mile away. The production manager was promptly arrested for littering, but Joan bailed him out of jail in time to finish the shooting.

17 The single bright spot in the project was Night themselves. They were thoroughly familiar with the script, never complained about the traveling (6000 miles and three locations in one single, hectic day of shooting), and seemed to know exactly what was required of them in every scene.

18 Night was a joy to work with. Even when the crew was dragging at the end of a long day of shooting, Night would play *Gonna Walk* as if it were

their first performance of the song that day instead of their fiftieth. Even crew members who had referred to them as Nightmare when shooting began were fans by the time it ended.

19 Joan had screened all the dailies as they came in, and was satisfied with the film footage. She had absolutely no idea of what the finished video would be like, however, and did not care. She flew a film editor experienced with music videos in from Los Angeles to produce the final product. He spent four hours on the job and flew back the same day.

20 That evening, Joan screened the video for the exhausted crew and cast. When the last frame of the film and the final measure of *Gonna Walk* had faded, there was absolute silence.

21 "Good grief," someone muttered into the darkness, "it's actually quite good."

22 Joan was breathless with the shock of this discovery. The video was funny and startling and inventive, and the music exactly suited the jumble of preposterous images.

* * *

23 Samuels, rooted in his chair for a full minute after the video faded, finally spoke in a choked voice. "It's—it's actually good! It's better than that! It's wonderful; it's terrific!"

24 Joan decided to take advantage of his flustered condition to ask him the question that had been on her mind for over a week. "Mr. Samuels, why *did* you hire me to do this video when you could have had any director on the West Coast?"

25 "Nobody out there would touch that script."

26 Joan stared at him.

27 "They said it was awful and ridiculous and couldn't be done, so I figured that what I really needed was somebody who didn't know what she or he would be up against. I flew here, looked in the Yellow Pages at the airport, and Coopersmith was the first listing." He went on, "See, they wrote the script. The Night. It's their song and it's their video script. If they couldn't use their script, they didn't want a video, and we had to have a video."

28 Joan looked from the check in her hand to the door as it closed behind Samuels. Then, quietly and carefully, she picked up a tattered copy of the script and threw it after him. It hit the door with a most satisfying thud.

HOW WELL DID YOU READ?

Did you understand the author's purpose?

1. **The author tells about Joan rereading her contract after the script arrives primarily to show**
   - **A** what a careful person she is
   - **B** how terrible she thinks the script is
   - **C** how little she trusts Samuels

2. **The author's purpose in writing this story was primarily to**
   - **A** entertain
   - **B** inform
   - **C** persuade

What is the point of view?

3. **The author describes the feelings of**
   - **A** Mr. Samuels
   - **B** Perpetual Night
   - **C** Joan Burchfield

Did you understand why?

4. **Joan threw the script at the door after Mr. Samuels left because she**
   - **A** was disgusted with his reason for hiring her
   - **B** felt she should have been paid more
   - **C** didn't like the music video

5. **Perpetual Night was familiar with the script and did not complain during the filming because its members**
   - **A** were hard-working professional musicians
   - **B** wrote the script themselves
   - **C** were being paid very well for the job

6. **The cockroach scene could not be filmed because the cockroaches**
   - **A** would not leave their container
   - **B** died before the filming began
   - **C** would not walk in a straight line

Do you remember the order of events?

7. **Who was injured during the circus scene?**
   - **A** Night's lead singer
   - **B** Night's drummer
   - **C** A stilt walker

8. **The first thing that happened after Joan's assistants read the script was that they**
   - **A** all quit at the same time
   - **B** put together a filming schedule
   - **C** hired assistants and crew members

Can you draw the right conclusions?

9. **Samuels was surprised when the music video turned out to be good because he thought**
   - **A** Joan didn't know what she was doing
   - **B** *Gonna Walk* was a bad song
   - **C** the script was terrible

10. **Joan's job as director was mainly to**
    - **A** organize and oversee production
    - **B** do all hiring and firing
    - **C** help to write the script

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. barred from consideration *(2)*
2. yielded; gave in *(3)*
3. carefully *(6)*
4. bring together *(7)*
5. all at the same time *(9)*
6. disasters *(12)*
7. cartoonists *(15)*
8. flair, zest, style *(15)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits each word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

9. stubby *(2)*
   - **A** short and dense
   - **B** covered with stubble
   - **C** heavy or stocky

10. shooting *(3)*
   - **A** filming
   - **B** wounding
   - **C** sending quickly

11. drafted *(6)*
   - **A** drawn away
   - **B** selected; conscripted
   - **C** prepared; composed

12. cast *(7)*
   - **A** throw of dice
   - **B** group; set of actors
   - **C** shape; appearance

13. rare *(15)*
   - **A** thin; not dense
   - **B** highly valued
   - **C** uncommon

C. Many words are built from shorter base, or **root**, words that you already know.

Directions: Each line below contains two words that have a root word in common. Use that root word to complete a third word that fits the definition. Write the word.

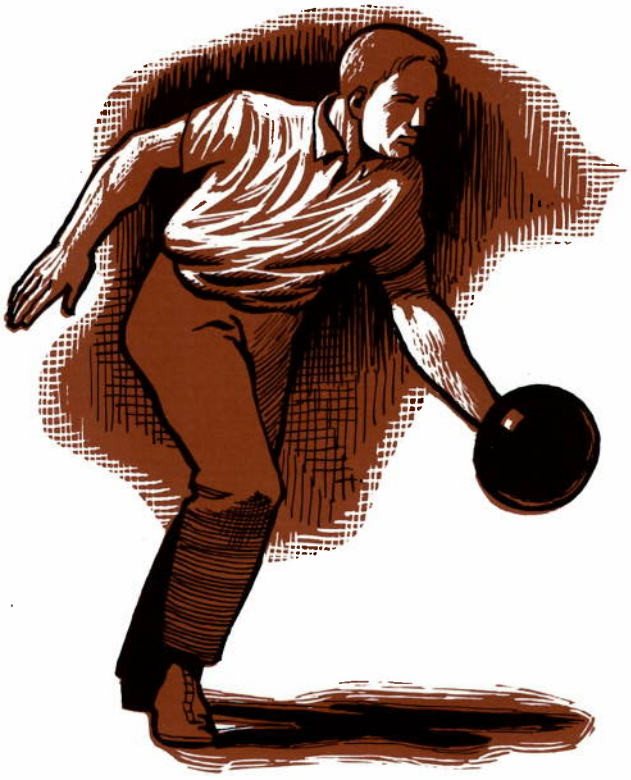
14. propose, imposed, de_____d
    (put out of office; dethroned)
15. acknowledge, known, un_____ing
    (not aware of something)
16. disloyal, loyally, _____ty
    (allegiance; faithfulness)
17. bloodhound, houndstooth, _____ed
    (kept after; followed closely)
18. preface, facet, de_____
    (spoil the appearance of)
19. attribute, distributed, con_____
    (give one's share)
20. misplaced, placement, dis_____d
    (moved from a customary position)
21. ungainly, regained, _____ful (profitable)
22. forgive, regiven, _____away
    (something offered free or at low cost)

D. Synonyms are words that have the same or nearly the same meaning.

Directions: Decide which two words in each line below are synonyms. Write the words.

23. ponder, consider, comprehend
24. spectacular, striking, apparent
25. ordinary, simple, usual
26. experts, authorities, guides
27. visible, discernible, concerned
28. stories, events, happenings
29. individual, separate, backward
30. realization, interpretation, explanation
31. surprising, startling, terrible
32. refuses, attempts, endeavors
33. destination, source, origin

7



THE RIGHT-HANDED WORLD IS A

Clumsy World for Lefty

by Wesley S. Griswold

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1 About three hundred million persons in our world share a handicap that makes their life quite frustrating at times; they are left-handed. They deal as best they can with doorknobs, zippers, buttons, gearshifts, scissors, corkscrews, and can openers. Each day these and hundreds of other items that were designed for use by the right-handed individual present problems for the lefty.

2 About one hundred twenty-five years ago a few feeble efforts were made on behalf of the left-hander. Shaving mugs with a side mirror to the right of the handle were made for him. Left-handed mustache cups were also available. On the whole, however, little thought was given to the problems the left-hander faced every day of his life.

3 Today many businessmen have started to consider in earnest the needs and preferences of left-handed people. After all, lefties form a large group—approximately 10 to 15 percent of the population in the United States alone. Manufacturers are finding it well worth their while to cater to the lefty, and are devising many new goods and services in an effort to meet his needs. Left-handed sportsmen, for instance, were once handicapped by right-handed equipment. Now they can buy equipment adapted for their use; left-handed rifles, baseball gloves, golf clubs, fishing reels, and bowling balls are quite common. A farmer can buy a left-handed sickle; a housewife, a left-handed refrigerator. A youngster can buy a left-handed pocketknife, or a musician can buy a left-handed saxophone. These are just a few of the products now manufactured for the exclusive benefit of the lefty.

4 In 1945, the Trade Bank and Trust Company of New York City started providing left-handed checkbooks as a special service. In an ordinary

checkbook the stubs are printed to the left of the check, because any well-trained checkbook user fills out the stub first. Using this system, left-handed clients often smudged the ink on the stub when they wrote checks. A special checkbook with the stub on the right can solve that problem, too.

5 The left-handed person today is still inconvenienced, but is no longer forced to conform to the right-handed world, like it or not. There was a time when parents and teachers shouted, "You'll learn to use your right hand or else!" In protest, a few high-strung youngsters who preferred to use their left hands began stuttering and became clumsy with both hands. There is no proof that forcing a nervous youngster to change hands is more likely to cause stuttering than obliging him or her to give up teasing the cat; nevertheless, parents of today, warned by psychologists, are inclined to let a left-handed child alone. The modern theory is: If you're a lefty, be a good one.

6 Scientists have decided that left-handedness is mostly the result of heredity. They also know that preference is not limited to a choice of hands; people often prefer the use of one eye or foot, or even of one side of the jaw. So because left-handedness is inconvenient, doctors usually recommend that right-handedness be encouraged. They do not, however, suggest forcing a child to switch hands when a decided preference for the left is noted.

7 Young babies can use either hand equally well. They simply reach for things with the hand that's closest. Parents are advised to encourage right-handedness by putting things within easier reach of the right hand. A child's natural preference begins to assert itself between the ages of six and twelve months. Most children decide the matter once and for all when they are between the ages of three and seven. If a child over seven hasn't determined hand preference and seems to use both hands equally well, psychological tests are advisable. These tests will help determine the degree of left-handedness. If the youngster's preference is not very strong, it will be easy to encourage using the right hand. If nature really intended a child to be a lefty—well, let him or her learn to play ball. Hall-of-Famers Babe Ruth, Lou Gehrig, Stan Musial, Willie McCovey, Sandy Koufax, and Lou Brock, all left-handers, have made baseball history.

8 There is at least one consolation for the left-handed minority. Researchers at the University of Wisconsin have found that left-handed students are notably quicker with the left than right-handed students are with the right. Curiously enough, other studies have shown that twice as many boys as girls are left-handed.

9 There seem to be associations between "left" and "bad" in the minds of many persons. Some primitive tribes in Africa insist that their women prepare all food with the right hand. The practice of wearing a wedding ring on the left hand reputedly started as an effort to ward off evil spirits. Languages also show this connection between "left" and "bad." The French word for left, *gauche*, means "awkward" or "tactless." The Latin word for left has become the English *sinister*.

10 There's no way of telling when things to the left first got a bad name; it happened early in history. The Greeks and the Romans thought it was most unlucky to hear thunder on the left. People in Guatemala watched their soothsayer's left leg: if the right leg muscles twitched, the future looked bright; if the left leg muscles quivered, watch out!

11 Social scientists generally believe that because about 90 percent of all persons are naturally right-handed, this was considered to be normal or good. The left-handed person was unusual, different, and therefore somewhat odd.

12 Popular opinion began to shift toward a more favorable point of view for the lefty when Alexander the Great ruled. Far from being handicapped by his left-handedness, he succeeded in conquering the entire known world. Later Charlemagne, another great ruler, found it handier to grip his sword with his left hand. In the times of these men left-handedness came close to being accepted.

13 Many notable persons in history have been left-handed. Among them are great artists—Michelangelo, Leonardo da Vinci, Raphael, and Picasso. President Garfield always threw the first baseball of the season as a "southpaw"; so did President Truman. Judy Garland and Marilyn Monroe were left-handed, as is tennis star Martina Navratilova.

14 Another lefty, as has been revealed by a candid photo, is Britain's Queen Mother Elizabeth. She was shown in the photo shooting pool, with

the cue in her left hand. About 10 percent of the newspaper readers who saw the picture got a special kick out of it, because she has the same problems they have.

15 It's a clumsy world for Lefty. It's getting better, but the left-hander still has problems in an indisputably right-handed world.

HOW WELL DID YOU READ?

Did you note the important facts?

1. **The proportion of left-handed persons in the United States is at least**
   - **A** one-half
   - **B** one-third
   - **C** one-tenth

2. **Children usually develop a preference for one hand**
   - **A** at birth
   - **B** by their seventh year
   - **C** before the age of six months

How well do you reason?

3. **Manufacturers today are producing left-handed articles because**
   - **A** they have discovered that it is profitable
   - **B** they are no longer superstitious
   - **C** there are more left-handed persons today

4. **Parents try to encourage their children to be right-handed because**
   - **A** they do not want them to be different
   - **B** left-handed persons are often distrusted by others
   - **C** left-handedness is inconvenient

5. **"Left" probably became associated with "bad" because**
   - **A** many criminals are left-handed
   - **B** left-handedness is unusual
   - **C** the Latin word for "left" is the same as the word for "sinister"

6. **A left-handed person would probably be somewhat handicapped when**
   - **A** painting a picture
   - **B** following a map
   - **C** learning to salute

What did the writer mean?

7. **"About one hundred twenty-five years ago a few feeble efforts were made on behalf of the left-hander" means that**
   - **A** no one felt sorry for left-handers then
   - **B** only a few things were made then for the left-hander's use
   - **C** left-handedness was not tolerated then

8. **"The right-handed world" is one in which**
   - **A** left-handed persons are not welcome
   - **B** only right-handed persons are considered normal
   - **C** most things are arranged for the convenience of right-handed persons

Did you notice the details?

9. **When left-handed children are forced to use their right hands, they**
   - **A** may or may not show the effect by starting to stutter
   - **B** always develop ill effects
   - **C** always become clumsy

10. **The cause of left-handedness is**
    - **A** not definitely known
    - **B** mostly one's environment
    - **C** mostly one's heredity

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. baffling; defeating *(1)*
2. able to be found and used *(2)*
3. planning; inventing *(3)*

4. adapt; become similar to others *(5)*
5. agitated; jumpy *(5)*
6. oddly; unusually *(8)*
7. according to report *(9)*
8. shown; uncovered *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

9. individual *(1)*
   - **A** particular thing
   - **B** single unit
   - **C** person

10. effort *(3)*
   - **A** exertion
   - **B** attempt
   - **C** achievement

11. associations *(9)*
   - **A** friendships
   - **B** organizations
   - **C** connections

12. practice *(9)*
   - **A** habit; custom
   - **B** trickery; scheming
   - **C** repetition in order to learn

13. special *(14)*
   - **A** unique; extraordinary
   - **B** definite
   - **C** chief

C. The **suffix** *-en* has several meanings. One meaning is "made of"; another is "make, cause to be."

Directions: Decide the meaning of *-en* in each word below. Write *made of* or *make.*

14. wooden
15. harden
16. golden
17. lengthen
18. sharpen
19. woolen
20. shorten
21. silken
22. heighten

D. Homonyms are words that sound alike but have entirely different meanings.

Directions: Column II contains three sets of homonyms. Write the word that fits each definition in column I.

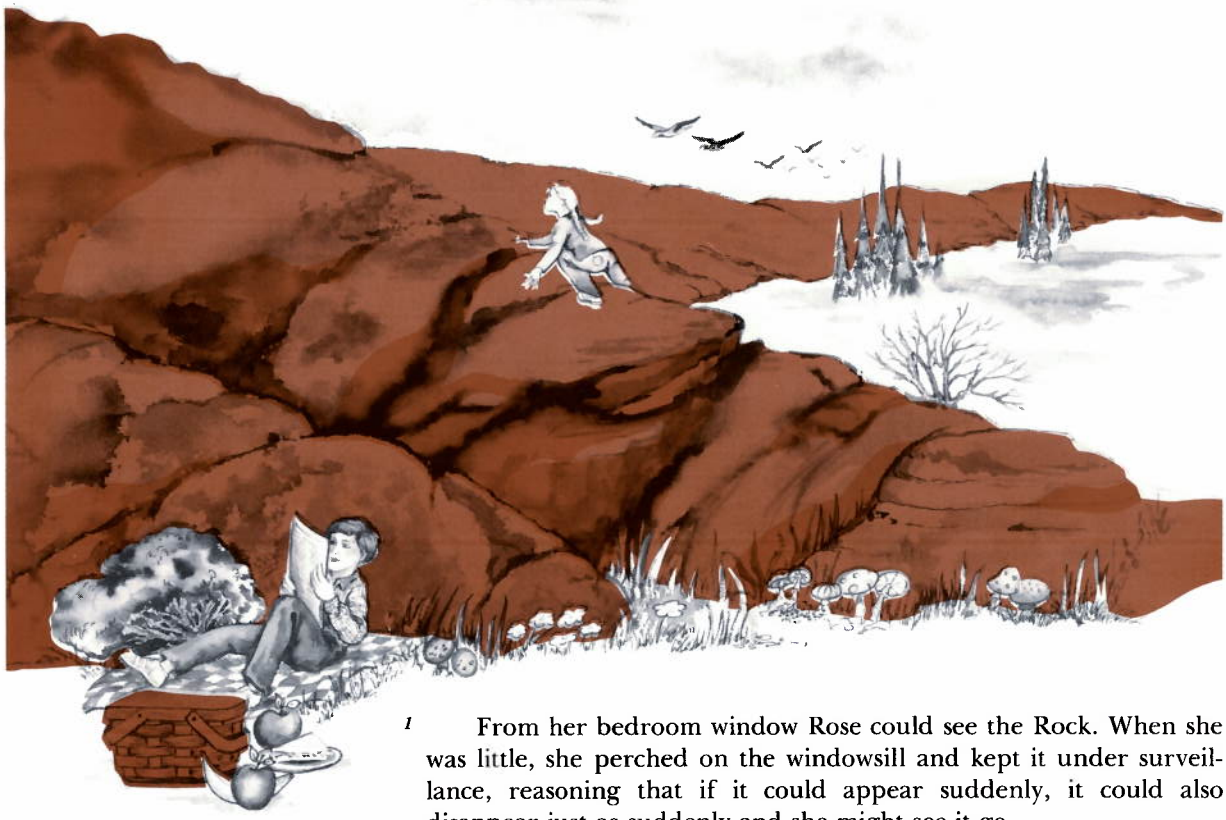
I	II
23. rabbit	beet
24. undulate; sway to and fro	beat
25. red root eaten as a vegetable	hare
26. give up; forgo; not use	hair
27. strike repeatedly	wave
28. growth covering the head; fur	waive

E. An **idiom** is an accepted phrase or expression that does not mean literally what it says. "The facts came to light" does not mean that the facts were brought from a dark place to a bright place. It means that the facts were revealed.

Directions: The idioms in column II are built on the word *light.* Write the idiom that best fits each meaning in column I.

I	II
29. with knowledge of	bring to light
30. understand	in the light of
31. make clearer; give more facts about	light up
32. reveal; disclose	see the light
33. make or become bright and cheerful	shed light on

8



the ROCK

by Mary Goodnurse

1 From her bedroom window Rose could see the Rock. When she was little, she perched on the windowsill and kept it under surveillance, reasoning that if it could appear suddenly, it could also disappear just as suddenly and she might see it go.

2 The Rock had appeared before Rose was born. Her mother steadfastly refused to discuss the event, but her father recounted stories about what happened in the weeks that followed. "It didn't fall from the sky; it just inexplicably was there, and where the cities and fields and towns and roads had been, there was a thousand-mile-long rock," her father declared. "Nobody knows what happened to the people. Some tried to dig, but the Rock descends thousands of feet, according to scientists. Nobody ever saw your grandma and grandpa after the Rock appeared."

3 About once a year he took Rose to see it. Her mother adamantly refused to accompany them on these outings, and so they packed a lunch and headed down the road toward the Rock, watching it loom larger and larger ahead, until the road ended suddenly at the steep nickel-colored cliff. After eating, Rose climbed its gnarled face while her father sat in its shadow reading the newspaper.

4 One day Rose's father showed her a map that had been printed before the Rock: there had been lakes and huge cities, forests and rivers. He told her of swimming in the deep clear waters of one of the lakes and climbing the great dunes of sand along its shore. He showed her where he had lived when he was a youngster.

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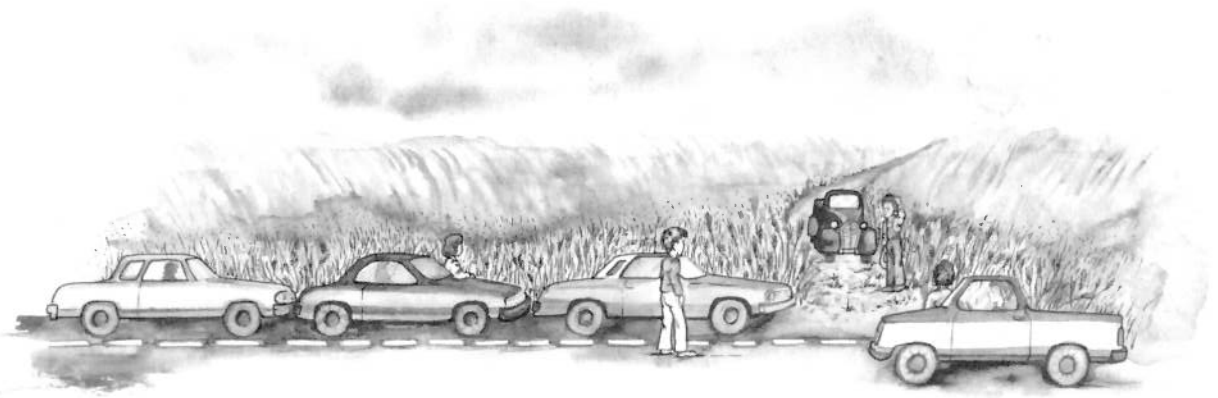

5 Later, at the playground, Rose discovered an anthill and tried an experiment with a large smooth stone. She pressed it firmly into the mound and watched as the ants ran furiously around and over it. Gradually they became calmer, more deliberate, and she saw that they were digging a new entrance at the edge of the stone. The following day when she returned to the playground and noted that the ants were once again tranquil, going about their duties as if nothing had happened, she removed the stone. She looked toward the Rock, its summit wreathed in clouds, and then down at the ants once again racing in aimless circles.

6 When Rose was eleven, people began to discuss giving the Rock a proper name, for it was, after all, a mountain of some economic importance. It was composed of nickel, copper, and iron, and had quickly become a major world source of these metals. Many of the mines and refineries were located in the North where the Rock rose from the frigid waters of Lake Superior, and ore or metal could be shipped directly to foreign ports via the St. Lawrence Seaway.

7 The name finally chosen was Mount Quillan after a famous military hero; however, although its new name appeared on maps, everyone continued to call it the Rock, which gave Rose's mother great satisfaction since she had found the idea of naming it repugnant from the beginning. "It's not a mountain—not a part of the natural landscape at all," she insisted. "It doesn't belong here!"

8 After Rose graduated from high school and trained as a computer programer, she accepted a position with a mining company based at the northern tip of the Rock. The small mining town in which she lived was totally dependent on the Rock, everyone's job depending in some way on the metals it contained. For the townspeople the Rock was not a massive, silent, alien presence, but a vital part of their everyday lives. The town park had been developed along its flanks as if it were a scenic river or valley or lakefront, and many houses and shopping centers had been constructed along it. Rose fell in love and married and settled down in the mining community to raise a family.

9 When Rose's youngest child was three, work began on a tunnel. For twenty-five years since the Rock had first appeared, surface travel between east and west had been onerous, requiring travelers to negotiate steep narrow roads blasted into and over the great rocky barrier. To replace them, a two-hundred-mile-long tunnel was planned. At first progress was slow, but gradually new equipment was developed and put into use. The operation was vast and complicated, providing employment for tens of thousands of people.

10 Rose's family moved south, and she and her husband became part of this extraordinary undertaking, settling in Gateway City, a bustling town that had sprung up at the western entrance of the tunnel near what remained of Hannibal.

11 Rose's parents, now in their sixties, lived only forty miles away, and Rose was delighted that her children would get to know her mother and father. She felt it was important for them to learn of the time before the Rock from people who had been living then. Rose's mother had long since come to terms with the Rock's presence and willingly told her grandchildren what she remembered about the day when the Rock had appeared and her own mother and father had disappeared forever.

12 Rose's father died of a heart attack the year the tunnel was completed. At that time Rose continued her work for the Tunnel Authority, so she was among the first to learn of the humming. In the beginning the sound was barely audible, inter-

mittent; but soon it grew louder, becoming incessant and alarming.

13 At first it was thought that the heavy flow of traffic had set up some kind of natural vibration, but tunnel engineers quickly disproved that theory. The hum reverberated so loudly that many drivers turned around at the first rest stop and came back out. Finally officials closed the tunnel highway to all traffic until a decision could be made regarding the tunnel's safety.

14 Sometime in the middle of the night two weeks after the humming started, it ceased abruptly and the Rock disappeared.

15 Rose attempted to telephone her mother, but the circuits were busy and her call couldn't get through. She and her husband jumped into their automobile and drove east until they reached what had been the junction of the Rock and the highway at the tunnel entrance. In place of the Rock, waving fields of ripening wheat stretched off to the horizon. An antique pickup truck roared toward them, westbound on a gravel road. Suddenly the pickup truck stopped and the driver got out and stood staring at the skyline of Gateway City—and at the hundreds of cars whose stunned passengers, emerging from their cars, were staring back.

HOW WELL DID YOU READ?

When did it happen?

1. The Rock appeared
- **A** before Rose was born
- **B** after Rose's father died
- **C** when Rose was eleven

2. After Rose moved to the mining town she
- **A** trained to be a computer operator
- **B** worked on a tunnel project
- **C** fell in love and married

Can you draw the right conclusions?

3. Rose's experiment with the ants showed that
- **A** the Rock had actually changed nothing
- **B** ants, like people, adapt to change
- **C** life is cruel and random accidents occur

4. At the end, the Rock was replaced by
- **A** a chunk of land taken from somewhere else, along with the people who lived there
- **B** nothing but a thousand-mile-long hole in the ground
- **C** the land it originally displaced, as it was when the Rock appeared

5. The Rock appeared in the United States, in
- **A** the Midwest
- **B** the Southeast
- **C** the Far West

6. Assuming that Rose's experiment with the ants is a foreshadowing device, what probably happened right after the story ended?
- **A** People became distressed, and frenzied in their behavior.
- **B** People accepted the new situation without reacting.
- **C** People became calmer and more deliberate in their actions.

Did you gain insight into the characters?

7. After twenty-five years, how did people react to the Rock?
- **A** They were no longer afraid of it.
- **B** They came to accept and even value its presence.
- **C** They felt its mysterious psychic influence.

8. Rose's father told her about the Rock and took her to see it most likely to
- **A** prove to her how evil and alien it was
- **B** show her what an economical boon it was
- **C** satisfy her curiosity and help her to learn about it

9. Rose's mother didn't like the Rock because
- **A** she didn't know where it had come from
- **B** she knew how much grief it had caused
- **C** she feared it would harm her family

What is the point of view?

10. This story is told from the point of view of
- **A** a man whose only daughter is struggling to understand a mysterious event
- **B** a couple whose destinies are linked with that of the Rock
- **C** a girl who grows to adulthood influenced by the presence of a huge, mysterious rock

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. close observation *(1)*
2. without a reasonable explanation *(2)*
3. firmly; not willing to yield *(3)*
4. calm *(5)*
5. encircled; interwoven *(5)*
6. distasteful *(7)*
7. extremely burdensome *(9)*
8. echoed; resounded *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

9. great *(4)*
   - **A** huge
   - **B** noble
   - **C** important

10. deliberate *(5)*
    - **A** intentional
    - **B** unhurried
    - **C** thorough

11. massive *(8)*
    - **A** heavy, weighty
    - **B** bulky, large
    - **C** widespread, severe

12. barrier *(9)*
    - **A** mental block
    - **B** starting gate
    - **C** physical obstruction

13. circuits *(15)*
    - **A** electrical paths
    - **B** regular journeys
    - **C** circular boundaries

C. *ward* (turning to; in the direction of)
ose (abounding in; full of)
ical (pertaining to; having the quality of)

A knowledge of these **suffixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the suffix *-ward, -ose,* or *-ical* to complete each word so that it fits the definition. Write the word.

14. verb_____ (containing too many words)
15. poet_____ (having to do with poetry)
16. back_____ (in a reverse direction)
17. econom_____ (pertaining to economics)
18. bellic_____ (warlike; full of ferocity)
19. home_____ (in the direction of one's home)
20. inim_____ (having the quality of hostility)
21. east_____ (in the direction of the east)
22. for_____ (turning to the front)

D. Homonyms are words that sound alike but have entirely different meanings.

Directions: Match each of these six words with its definition.

peak, peek, pique road, rode, rowed

23. glance furtively; peer quickly
24. was carried
25. way; path; course
26. propelled a boat by using oars
27. topmost part
28. resentment; displeasure

E. An **idiom** is an accepted phrase or expression that does not mean literally what it says. "The milkman made his rounds" does not mean that he drew circles. It means that he followed his usual route or circuit.

Directions: The idioms in column II are built on the word *round.* Write the idiom that best fits each meaning in column I.

I	II
29. in a circular theater, with the audience round the stage	round up
30. complete; finish	go the rounds
31. indirect; meandering	in the round
32. collect in a herd	roundabout
33. circulate among many people	round off

9

by Peter Freuchen

Unsolved Mystery--THE SEA

1 I really began to learn about the seven seas in Greenland, although I was born and raised in a little port, Nyköbing Falster, in Denmark. I had known ships and sailors and stories about famous voyages all my life, but when I sat through the long, dark nights of the arctic winters at Thule for years, for many years indeed, I discovered the wondrous ocean in my imagination.

2 There was little enough of it that we could see, for all winter long the ice stretched out for interminable miles and miles in front of us, firm and solid. As soon as the sun showed over the horizon in spring, we had a wide outlook; but it took months for the ice to break up, and during that time it was tantalizing to look out from the shore at huge icebergs drifting south in endless procession. When a fellow is sitting alone for months as I was, he lets his imagination fly freely. In my mind I followed those big fragments of icecap as they floated eternally to their doom. I thought of them sailing so majestically south until they were off Newfoundland; I knew they would turn east there and meet the warm waters of the Gulf Stream where they would die, swiftly and inevitably, for the Gulf Stream can finish off even a large berg in twenty-four hours.

3 Well, I wondered, where does the Gulf Stream originate, and why and how does it happen to be exactly where it is? On the sails of my imagination still, I followed this mighty current to where it is born in the Caribbean.

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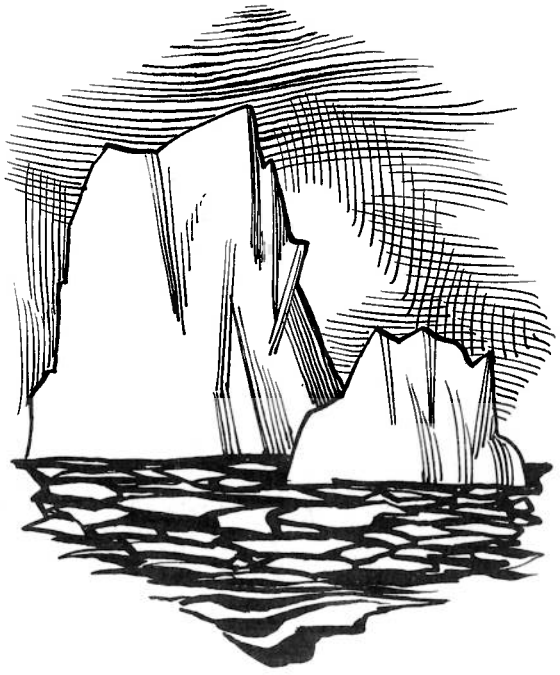

That took me to the waters of other currents, and to studying the winds and tides that play such an important part in the mysterious movements of the sea. Why, I asked myself, do the winds blow so steadily in one place and so capriciously in another, and not at all somewhere else; why should the tide rise as high as a house on one coast and hardly at all on another? Why twice a day in most of the world, but in some places only once? And where, after all, does all that water come from in the first place?

4 Little by little it dawned upon me that there is a logical connection between all the things that happen in that immense connected body of salted water that covers 71 per cent of the surface of the earth. The amazing fact is that the ripples from a pebble thrown by a child could actually be traced all over the seven seas if only we had scientific instruments delicate enough to record them. There is, indeed, a grand pattern in the wonderful phenomena of the ocean. This pattern regulates the ocean's storms and calms, deeps and shallows, the animals and plants that inhabit it, the birds flying over it, its myriad islands, volcanoes, and caves, and even the men and ships moving about on its surface.

5 Since those long, dark, lonely winters in Thule, I never have stopped wondering and learning about the seven seas. Why seven? This was one of the first questions I asked myself, since I could easily name seven times seven that are called seas on the maps. For every answer I found, there were two new questions, because the majesty and the mystery of the sea are inexhaustible, and much lies beyond the comprehension of man. Immense in their extent, irresistible in their power, unconquerable in their precision, the seas have inspired men through all ages with feelings of awe and mysticism and fear. Man feels himself weak and impotent when he faces their might, for no one can halt the tides or fight the currents or control the waves. But everywhere men feel a compulsion to pit their strength against the sea, to explore it and wander about on it, to use it for their own ends and wrest its wealth from it.

6 Primitive people worshiped the sea out of fear of what it might do to them, and in gratitude for the treasures which it washed up for them on its beaches. Even in the days of Columbus, the sailors were deathly afraid of "monsters" in the sea that might rise at any moment from the mysterious depths and devour them. The Romans believed the sea to be a dark kingdom ruled by a god whom they called Neptune. Today we know a great deal more than was known in ancient times; yet we still stand on the shore, humble in our insignificance as we face the waves rolling in from a turbulent ocean.

7 When gales whip the trees and rattle our windows, or snow piles up outside so that no one wants to go for a walk, landlubbers snug and safe in warm rooms are likely to tell each other how sorry they feel for all the poor sailors on a night like this. But, underneath the sympathetic talk, they actually feel a little wistful envy of the men who brave the elements—winds, rain, snow, cold, and storms—upon the restless water. Then on a fine day the sight of foreign seamen, or of tall ships from far away, or of an exotic bit of merchandise from halfway round the world, or even an oddly shaped scrap of driftwood cast up on the beach gives any of us a pang of jealousy of the men who move about over the sea viewing the wonders of the deep. And it must be confessed that these incredible wonders lose

nothing in the seamen's telling of them, for their words seem to set fire to the imagination and give shore-bound people a sense of excitement that they can never find on land.

8 The fascinating stories these fellows bring us are the stuff our dreams are made of. Perhaps we may not believe the salty tales for a minute, but in our secret minds we live them, and we are all great heroes in these dreams. We experience countless exciting adventures, and we drift endlessly in hot, dead calms while all on board except us are in despair. We baffle the most violent storms, conquer the bravest fighters, foil the most bloodthirsty pirates, bring home the richest cargoes from the most amazing voyages, wrestle with monsters, dive for sunken gold, see the strangest sights. Then, in the end, science takes over from imagination—and behold, there are even greater wonders than we dreamed.

HOW WELL DID YOU READ?

Can you read between the lines?

1. **This selection was probably taken from the beginning of a**
   - **A** reference book about weather
   - **B** sailor's handbook
   - **C** study of the seas

2. **The author's main purpose was to**
   - **A** supply factual information
   - **B** trace the route of the icebergs in an imaginative way
   - **C** pass on to the reader his own feeling about the sea

What did you learn about the author?

Which of the following statements would seem to be true of Peter Freuchen? Write *true* or *false* for each statement.

3. He has great love and respect for the sea.
4. He is a land dweller who has never been to sea.
5. He is a land dweller who hopes that he will never need to go to sea.
6. He knows many of the salty tales of the sea and tells them well.
7. He has never studied the sea in a scientific manner.
8. He believes that the mysterious fascination of the sea is being destroyed by scientific investigation.

Can you draw the right conclusions?

9. **The main point of this article is that the seas are**
   - **A** contrary to the pattern of nature
   - **B** wondrous
   - **C** unconquerable

10. **The statement "all on board except us are in despair" is intended to show**
    - **A** how exaggerated sailors' tales can be
    - **B** what life on the open seas is like
    - **C** how sailors' stories fire the imagination

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. teasing *(2)*
2. with certainty; unavoidably *(2)*
3. unpredictably; playfully *(3)*
4. innumerable; many *(4)*

5. exactness *(5)*
6. irresistible desire *(5)*
7. unbelievable *(7)*
8. frustrate; foil *(8)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

9. outlook *(2)*
   - **A** attitude
   - **B** probable outcome
   - **C** view

10. traced *(4)*
   - **A** found the source of
   - **B** outlined
   - **C** followed

11. delicate *(4)*
   - **A** weak
   - **B** sensitive
   - **C** dainty

12. elements *(7)*
   - **A** natural environment
   - **B** natural forces
   - **C** components

13. tales *(8)*
   - **A** stories
   - **B** gossip
   - **C** lies

C. Many words are built on shorter base, or **root,** words that you already know.

Directions: Each line below contains three words that have a root word in common. Write the root word for each set of three words.

14. complain, plaintively, plaintiff
15. reflexive, inflexible, flexor
16. erratic, aberration, erroneous
17. monarch, patriarchy, archangel
18. refinement, confines, defined
19. omniscience, conscience, sciences
20. secretary, secretion, secrete
21. dissect, vivisect, section
22. mistaken, takers, takedown

D. Synonyms are words that have the same or nearly the same meaning.

Directions: For each word in column I, find a synonym in column II and write it.

I	II
23. voyages	endless
24. wondrous	begin
25. interminable	system
26. doom	journeys
27. originate	understanding
28. steadily	many
29. logical	marvelous
30. pattern	grandeur
31. myriad	destruction
32. majesty	reasonable
33. comprehension	constantly

10

Zenobia

QUEEN OF THE EAST

by Richard Halliburton

1 Palmyra, a once splendid city whose ruins in the Syrian desert can still be seen, was the capital of one of the most unusual rulers in history. She was Zenobia, who called herself Queen of the East.

2 Zenobia was born in the desert of eastern Syria about A.D. 220. Her father, Zabbai, was an Arab Bedouin chieftain. Her mother was a beautiful Greek woman who proudly claimed Cleopatra as an ancestor.

3 The girl's early home was a goat-hair tent, pitched now in the sands, now beside some oasis in the shadow of the palms. While Zenobia was still very young, her parents realized that she had been greatly blessed. Zabbai's people had never seen such a beautiful child. In addition to her beauty she had strength and intelligence. By the time she was twelve years old, she had learned to ride a camel as far and as fast as anyone in the tribe, and she already showed signs of the qualities of leadership that were to make her a proud and powerful queen.

4 At that time the eastern half of Syria was ruled by the city of Palmyra, an oasis at the junction of the great desert caravan routes. Through Palmyra traveled the riches of the East on their way to the markets of the West—Greek, Jewish, Arab, and Syrian merchants came to trade silks, carpets, dates, and grain. The city was a rich prize, and eventually it was seized by the Romans.

5 Odenathus was the ruler of Palmyra. Although the Romans had given him his power, Rome was far away, and he was ambitious. Little by little he took the government away from Rome and into his own hands. Finally he planned a revolt, and made trips into the desert to recruit and train tribesmen to fight with him. It was on one of these trips that he met Zenobia. The prince was captivated by this beautiful, wild-riding girl, and asked Zabbai for her hand. They were married in a lavish ceremony, and dark-eyed Zenobia, at the age of eighteen, moved to Palmyra to live in a carved stone palace.

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6 In time they had three sons and several daughters. Zenobia saw to it that her children were well educated; she even brought the philosopher Longinus from Rome to be their tutor.

7 The young queen took an interest in all the affairs of state. She impressed the ministers with her shrewd judgment and the army generals with her daring. She learned to plan military campaigns and to drill and lead the Arab soldiers. She herself led a charge against the Persians, whose armies had been threatening Palmyra from the east. Encouraged by this success, Odenathus and Zenobia attacked a Roman army in northern Syria; the daring plan worked, and the enemy was destroyed.

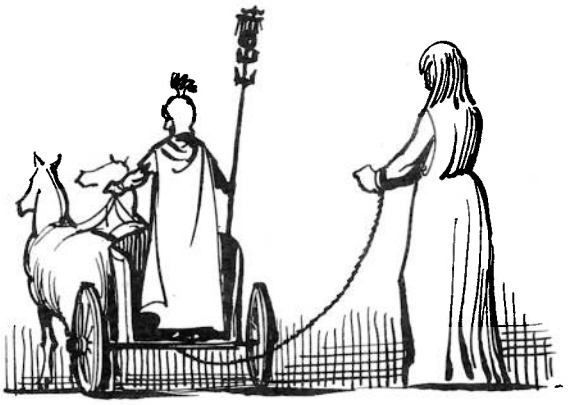
8 Amazed and frightened at these victories, the states neighboring on the Syrian desert joined forces with Palmyra. At the height of this success, however, Odenathus was murdered. Zenobia was left to rule alone. She proclaimed herself absolute monarch of Palmyra and added the proud title, Queen of the East.

9 The widowed queen looked about for new worlds to conquer. To the southwest lay rich, civilized Egypt. She sent seventy thousand of her troops to the Nile, and they seized the country after one victorious battle. No army seemed able to withstand Zenobia's might. Astride her white camel, her purple cloak flying, she led her cavalry across the sands from one victory to another. Syria, Egypt, Arabia, Palestine, Persia, Asia Minor—all fell before the Bedouin queen. By the time she was forty years old she ruled nearly half of Rome's former empire.

10 Zenobia was popular in her adopted city-state. Homage, wealth, and glory poured into Palmyra, and the city promised to become the Rome of Asia. Artists and poets traveled to the desert kingdom from Europe and the East. White temples and palaces gleamed across the desert. Camel caravans, laden with riches, wound in and out of the city gates. Everywhere the people cheered Zenobia as she rode fearlessly about the city.

11 Zenobia knew that Rome's power and pride could not be ignored; a final clash must come. Rome, aroused by Palmyra's rebellion, victories, and growing might, was preparing to fight for the mastery of the Eastern world. The Syrian queen made preparations too. She bolstered the strength of her armies and built fortresses on the frontiers.

12 When the Romans sent a general and their best troops to humble the proud queen, they underestimated Zenobia's military skill. It was the Roman general who was humbled, and Roman soldiers who were killed. A second army was sent against Zenobia. This time she met her match in Aurelian, the general who was later to become emperor of Rome. The Arab cavalry that had swept from the Black Sea to the Nile went down before his veteran troops. Zenobia and the remnants of her forces retreated inside Palmyra's walls; there Zenobia vowed that she would die rather than surrender. When Aurelian offered to spare the city upon her surrender, she mockingly refused. During the desperate siege that followed, Zenobia moved about the ramparts, encouraging her soldiers and fighting with her own spear where there was need. However, even her courage and determination were not enough. The city's food supply gave out; the army was weakened by starvation. Unless Zenobia could enlist the aid of the Persians, Palmyra was doomed. She resolved to escape and seek aid from Persia herself.



13 Under cover of a dark night, she and a few followers lowered themselves into the Roman camp at the foot of the wall. They crept past the Roman sentries, mounted camels, and turned east toward the Euphrates River. Riding by night and hiding by day, they finally came within sight of palms ahead—the palms that marked the banks of the Euphrates. Across the river was Persia—and safety. Looking back, Zenobia saw the Romans in pursuit. Frantically she shouted

at a fisherman to come and fetch her. He was puzzled, but he turned his boat and rowed toward her. The Romans arrived before he could reach the shore.

14 Aurelian took the defeated queen and many other prisoners to Rome. There, bound in gold chains, the Queen of the East marched behind his chariot in his triumphal parade—a bitter experience for the queen who had once dreamed of conquering Rome. Aurelian treated his distinguished captive generously, presenting her with a handsome villa near Rome. There she was allowed to live out her days peacefully as a Roman matron.

15 The empire of the East crumbled with the fall of Palmyra and the capture of its queen. The splendor and pomp of Palmyra became only a memory. But the name of Zenobia still remains a symbol of glory and pride.

HOW WELL DID YOU READ?

Did you note the important facts?

1. **Zenobia was born about**
   - **A** 220 B.C.
   - **B** A.D. 220
   - **C** 220 years ago

2. **Palmyra was originally a rich city because of**
   - **A** its military strength
   - **B** its location
   - **C** the wisdom of its rulers

3. **After the fall of Palmyra, Zenobia's empire**
   - **A** fell apart
   - **B** was ruled by her children
   - **C** was handed over to the Romans

What did you learn about the characters?

4. **Odenathus was**
   - **A** easily led
   - **B** ambitious
   - **C** indecisive

Can you see the reasons?

5. **The states neighboring on the Syrian desert joined forces with Palmyra because they**
   - **A** were afraid that they would be taken by force
   - **B** admired Zenobia
   - **C** saw a way to make a profit for themselves

6. **Zenobia attacked Egypt because**
   - **A** it threatened her empire
   - **B** it was there for the taking
   - **C** she wanted to avenge Odenathus

7. **Zenobia knew that Rome would try to reconquer Palmyra because**
   - **A** she had made it a rich city
   - **B** Rome was jealous of her power
   - **C** she had taken away all of Rome's empire

Can you put the facts in order?

8. **Palmyra showed promise of becoming the Rome of Asia**
   - **A** after Zenobia built her empire
   - **B** during the time that Odenathus ruled
   - **C** after the Romans took it and settled there

9. **Zenobia's first addition to her domain was**
   - **A** Palmyra
   - **B** Egypt
   - **C** Arabia

10. **Zenobia's last noble deed as a general was**
    - **A** enlisting the aid of the Persians
    - **B** building frontier fortresses
    - **C** refusing Aurelian's mercy

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. nomad; member of a wandering tribe *(2)*
2. desert watering place *(3)*
3. crossing; coming together *(4)*

4. elaborate; magnificent *(5)*
5. keen-witted; cunning *(7)*
6. unrestricted; supreme *(8)*
7. respect; praise *(10)*
8. celebrated; eminent *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

9. pitched *(3)*
   A thrown
   B aimed
   C set up

10. signs *(3)*
   A indications
   B signals
   C symbols

11. prize *(4)*
   A something won in a contest
   B something very valuable
   C thing taken by force; spoils

12. charge *(7)*
   A fee
   B load; burden
   C attack

13. height *(8)*
   A distance to the top
   B greatest degree
   C distance above sea level

C. Many words are built on shorter base, or **root,** words that you already know.

Directions: Each line below contains two words that have a root word in common. Use that root word to complete a third word that fits the definition. Write the word.

14. handyman, handwriting, _____made
(not made by machine)

15. independent, dependable, _____ent
(relying on someone for aid)

16. livelihood, alive, _____ly
(spirited; active)

17. matchmaker, matching, _____less
(having no equal)

18. misadventure, ventured, ad_____
(an exciting undertaking)

19. distemper, temperance, _____amental
(easily upset; moody)

20. product, inducted, con_____or
(man in charge of train passengers)

21. firmly, reaffirm, con_____ed
(solidly established)

22. holding, foothold, pot_____er
(pad for grasping hot pans)

D. Synonyms are words that have the same or nearly the same meaning.

Directions: Decide which two words in each line below are synonyms. Write the words.

23. junction, crossroads, route
24. virtually, good, practically
25. located, near, placed
26. uprising, revolt, battle
27. opposition, consent, permission
28. scold, shrewd, clever
29. threatening, powerful, menacing
30. announced, proclaimed, requested
31. domination, popularity, mastery
32. proudly, valiantly, bravely
33. vowed, stated, swore

by Marston Bates

Winter Comes to the Animal World

1 Often a season's acorn and hickory crop fails because a late spring frost kills the flowers before the nuts are formed. This creates a problem for the local squirrels, since they are unable to lay in adequate stores for the winter. The squirrels probably get along all right scrounging from the local citizens—people are useful sometimes—but it makes one wonder about the winter problems of animals out in the woods.

2 Most birds, of course, manage nicely by the simple process of flying to some region with a more sensible climate. Apparently this is not so much a matter of temperature as of food. After all, quite a few kinds of birds do live all year round even in the far North: grouse, for instance, by eating things like spruce buds; owls by continuing to harry the local mice and other rodents; crossbills by their expert dissection of pine cones. But the birds that live on seeds, berries, and insects face not only vanishing supplies but also a shortage of daylight hours in which to hunt the food that might still be around. So they leave.

3 Migration is out for any animal that cannot fly. To be sure, caribou move from the tundra into the forests, and mountain sheep move to lower slopes. They may cover quite a bit of territory in such travels, but this is far different

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from moving from New York to Florida, let alone the West Indies or South America. The pedestrian majority of the animal kingdom has to find some way of getting through the winter without moving from home. Quite a few mammals have chosen the squirrel's solution—stashing away winter food supplies. Squirrels, incidentally, often act as though they knew what they were doing. However, there is disagreement among the experts whether squirrels remember where they have hidden food or whether they locate their caches again with their keen noses. If they depend on memory, either they often forget or they store more food than they need, because the nuts and acorns they fail to retrieve are numerous enough to be an important factor in the seeding of forests.

4 Animals such as rabbits and deer continue to be active all winter, finding food wherever they can. Summer's dried vegetation makes a sort of natural hay. Trouble comes when this is buried in snow—but then the deer take to eating branches and twigs, and the rabbits to stripping bark from small trees. The latter is a source of great irritation to both farmers and foresters, since trees may be girdled and killed.

5 Squirrels are about the smallest mammals able to be active in cold weather, because small size makes it hard to maintain body temperature. The smaller the animal, the greater the surface area in relation to body mass. Since heat is lost through the surface, a mouse, for example, simply cannot keep up its body temperature in a very cold environment. Small mammals that remain active all winter retreat under the snow. It is said that in the north woods even the squirrels dig into the snow when air temperature drops to twenty-five degrees below zero Fahrenheit. Snow is an excellent insulator. Temperatures at the ground surface under a snow cover rarely drop below about twenty degrees Fahrenheit, even in Siberia or Alaska where air temperatures fall to fifty degrees below zero.

6 Many mammals live through the winter by closing shop—hibernating. There is a nice problem of definition here. Most experts now agree that a mammal can be said to hibernate only if its body temperature drops greatly and its whole metabolism—including respiration and heart rate—is much reduced. This is the case

with animals like the woodchucks, hamsters, and hedgehogs, which hibernate in their burrows, and bats, which congregate in caves. Bears, however, are not classed as hibernators. They pass most of the winter sleeping, but their body temperature drops only a few degrees, and they can become active without going through a slow process of warming up. Bears, counting on fat reserves to keep them going, even produce their young during this period.

7 Mammals and birds are warm-blooded—that is, they have a means of keeping the temperature of their bodies quite constant despite the normal temperature fluctuations of the outside world. Cold-blooded animals—fish, reptiles, insects, amphibians—also have a certain amount of control over their body temperature. They can warm up, if they are too cold, by sunning themselves, or cool off by getting into the shade. But it is hard for cold-blooded animals to keep warm in the winter. For any animal to be active, its body temperature must be above freezing. This is because the chemistry of life depends on water in a liquid state. If the body actually freezes—if ice crystals form in the tissues—the whole system is disrupted, and the animal dies. So cold-blooded animals in the North must either find some place to spend the winter where temperatures do not reach the freezing point, or develop a special resting stage in which the water content of the protoplasm is much reduced. This will make its freezing point much lower than usual. Thus animals about to hibernate often dig down into the soil. In winter, fish are able to keep active in water under the ice, for it is usually three or four degrees above the freezing point. Many amphibians pass the winter in the unfrozen mud at the bottom of ponds.

8 Insects have developed a wide variety of ways to pass the winter. Only the milkweed butterfly migrates south in great numbers. Adult

mourning cloaks and tortoise-shell butterflies hibernate, immobile in the crevices of tree trunks. They are the first butterflies to be seen in the spring. A few butterflies hibernate in the caterpillar stage, and many other insects pass the winter as larvae, or eggs.

9 These creatures have developed a wide variety of ways to cope with winter conditions. Yet, when one looks at the animal kingdom as a whole, the vast majority of kinds live only in the tropics, where winter is no problem. Relatively few species have developed any of the adaptations that would enable them to survive a period of cold and food scarcity. But in January one wonders not why there are so few kinds of animals in the North, but how any of them manage to get along without benefit of central heating.

HOW WELL DID YOU READ?

What did the writer say?

1. **The main reason birds fly south in winter is that the**
   - **A** temperature drops
   - **B** food supply diminishes
   - **C** hours of darkness decrease

Can you evaluate the evidence?

2. **One factor in the seeding of forests illustrates the fact that squirrels**
   - **A** do not always retrieve their nuts
   - **B** locate their stores by memory
   - **C** locate their stores by sense of smell

3. **Snow can most fairly be called**
   - **A** a threat to small animals
   - **B** a destroyer of food supplies
   - **C** an aid to survival

Do you see the reason why?

4. **Very small animals lose heat rapidly because**
   - **A** they do not have enough insulating fur
   - **B** their surface area is great in proportion to their body mass
   - **C** they are too active

How exact was your reading?

5. **When the air temperature is 50 degrees below zero, the temperature under the snow would probably be**
   - **A** 70 degrees below zero
   - **B** 50 degrees below zero
   - **C** above zero

6. **Most experts agree that true hibernation involves**
   - **A** sleeping through the winter
   - **B** reduced heart rate and temperature
   - **C** decrease in water content

7. **The body temperature of a cold-blooded animal**
   - **A** is always lower than air temperature
   - **B** stays at a fairly constant level
   - **C** changes in response to air temperature

8. **Reducing the water content of an animal's body protoplasm will**
   - **A** lower the point at which its body freezes
   - **B** enable it to survive if it should freeze
   - **C** enable it to stay completely motionless

9. **Fish below the ice are able to**
   - **A** freeze and thaw out in the spring
   - **B** hibernate
   - **C** keep active during the winter

What does the author think?

10. **The author thinks it is remarkable that**
    - **A** so few animals live in the North
    - **B** so many animals live only in the tropics
    - **C** survival is possible in the North

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. sufficient *(1)*
2. torment; worry *(2)*

3. taking apart *(2)*
4. walking; on foot *(3)*
5. hidden storage places *(3)*
6. gather together; assemble *(6)*
7. unchanging *(7)*
8. motionless *(8)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

9. nicely *(2)*
   - **A** exactly
   - **B** satisfactorily
   - **C** attractively

10. keen *(3)*
   - **A** sharply pointed
   - **B** sensitive; acute
   - **C** eager; enthusiastic

11. point *(7)*
   - **A** speck or dot
   - **B** projecting piece of land
   - **C** stage or condition reached

12. reduced *(7)*
   - **A** lessened
   - **B** brought into order
   - **C** conquered

13. pass *(7)*
   - **A** judge
   - **B** hand on; transmit
   - **C** go through

C. *ante* (before; prior to; in front of; preceding)
post (after in time; later; following; after in space; behind)

A knowledge of these **prefixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the prefix *ante-* or *post-* to complete each word so that it fits the definition. Write the word.

14. _____room (a small room leading into a larger one)
15. _____date (come after in time)
16. _____date (come before in time)
17. _____cedent (any happening or thing prior to another)
18. _____erity (all of one's descendants)
19. _____penultimate (second from the last)
20. _____bellum (before the war)
21. _____pone (put off until later)
22. _____graduate (referring to something done after graduation)

D. Antonyms are words that have opposite or nearly opposite meanings.

Directions: Look at each pair of words. If they are antonyms, write **A**. If they are not antonyms, write **N**.

23. region – section
24. local – foreign
25. expert – unskilled
26. vanishing – appearing
27. shortage – abundance
28. vegetation – plants
29. source – destination
30. irritation – annoyance
31. retreat – advance
32. reserves – stores
33. fluctuations – variations

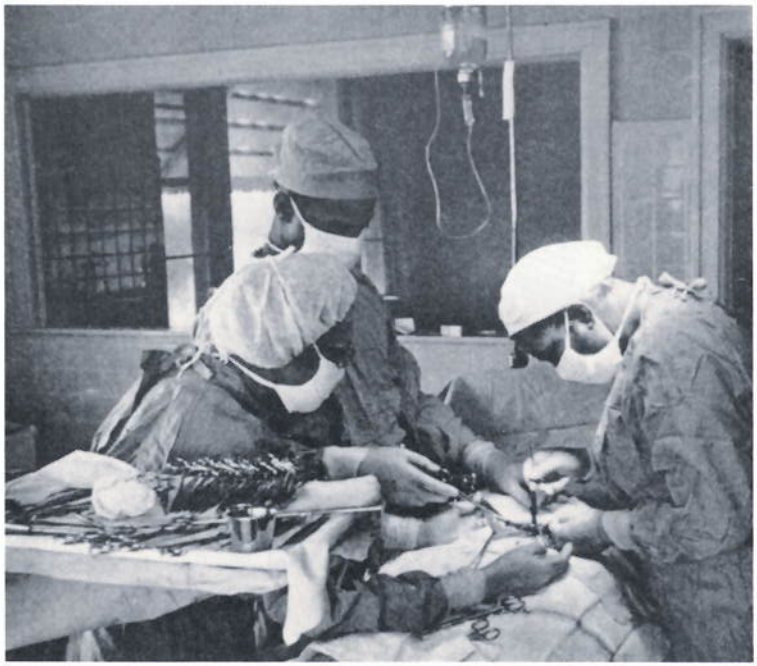
If you enjoyed reading the Brown Power Builders, you might also enjoy the following Literature Selections:

13. *The Snow Goose*
14. *Silent Snow, Secret Snow*
15. *Publicity*

1

Dorothy L. Brown: A Woman of Firsts

by Elizabeth Levy and Mara Miller



Courtesy of Dorothy L. Brown

Dr. Dorothy L. Brown (right) in surgery

1 The young woman in the Meharry Medical College elevator was unobtrusively attempting to read the name tag on the older woman's laboratory coat. After ascertaining that it said what she *thought* it said, she cleared her throat and asked hesitantly, "Are you really . . . I mean, are you the Dorothy L. Brown that the residence hall is named after?"

2 The other woman smiled broadly and replied, "I sure am." The student's eyes widened and she blurted out, "But I thought you were *dead!*"

3 An understandable mistake: not many people have buildings named after them during their lifetime.

* * *

4 Dr. Dorothy Lavinia Brown is the first black woman to practice general surgery in the South and the first black woman ever to win an election and sit in the Tennessee state legislature.

5 Dr. Brown's story is an exceptional one. "When I was a youngster, I was a complete extrovert, growing up in a sea of white people. I was in an orphanage in Troy, New York, with about 350 kids, and only six of us were blacks. If you had enough colds during the school year, then when school closed you were selected to have your tonsils and adenoids out. When I was five, they sent me to the hospital for that and I caused quite a stir. I insisted that I wanted to make the rounds with the nurses, and I wanted to use the doctor's stethoscope and carry my chart into the operating room.

6 "You see, I was completely oblivious to the business of race. I was enthusiastic and enthralled by the sights and smells of medicine. I wanted to be a doctor from then on.

7 "Nobody laughed at me. At that orphanage we were encouraged constantly to assess what we wanted to become. So when I was five and said I wanted to become a doctor, there was no one to say, 'Why, that's insane!'

8 "There was a policy at the orphanage that when black kids reached about fourteen or fifteen, they'd be farmed out to work in the wealthy homes in the neighborhood to learn how to be cooks, maids, and butlers.

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9 "During the summers and after school, I was working as a maid. All the people I worked for knew I was trying to save money for college, so when I said to them, 'Will you let me try to do a whole day's work in just half a day, but pay me for the whole day?' they agreed. The work was very heavy physically and quite demanding."

10 "One day this lady I worked for told me that the Methodist Women of Troy Conference were looking for a black girl to send to Bennett College in Greensboro, North Carolina, all expenses paid." Brown met with the women, "and that's how I got to college."

11 After completing her medical training at Meharry Medical College in 1948, Brown interned at Harlem Hospital in New York and then tried for a residency there. However, Harlem Hospital was not ready for a woman resident in general surgery so she returned to Meharry. At Meharry there were also obstacles; for one, the staff felt a woman couldn't withstand the rigors of five years of training in general surgery.

12 "But I was pretty insistent," she recalls, "and there were no rigors whatsoever. Of course, there were not going to be any as far as I was concerned because I was bound, bent, and determined that if necessary I would overcompensate to see to it that I made it."

13 Not everyone embraced the idea of a woman surgeon. "I had one man, an elderly man who had a preoperative diagnosis of ruptured appendix. I was chief resident at the time, which means that I had nine to eleven fellows working under me, but, of course, as chief resident I was charged with doing the surgery on the poor-risk cases. So I went around to the ward to take a look at this poor-risk old gent before I operated on him and he looked up at me and said, *'You're* not going to operate on me?'

14 "I said, 'Oh, yes, I am, sir.'

15 "He said, 'You'd better get one of these fellows to operate on me because you ain't nothing but a little old girl, and you don't know what you're doing.'

16 "I said, 'Okay.' I let the fellows go on and work him up, and I just waited until he got to the operating room, then I operated on him. . . . I told him afterward."

17 Dr. Brown, the first female general surgery resident, went on to become Clinical Professor of Surgery at Meharry Medical College and Chief of Surgery at Riverside Hospital.

18 When she began private practice in 1955 she was told she'd starve to death since people in the black community of Nashville would never accept a woman surgeon, but several decades later, she's *still* in private practice.

19 "One of the reasons I went into a specialty instead of going into the immensity of general practice was that I was just afraid I didn't know enough medicine to save enough people.

20 "There's no use my telling a lie. When I lose a patient, I spend the rest of that night going through that patient's records to see if I have made a mistake, to see if there wasn't something else that I could have done that would have spelled the difference between life and death. These things weigh upon me and I think this is one of the reasons that I work so hard."

Courtesy of Dorothy L. Brown

Representative Brown, Tennessee legislature, 1966–68

21 Because she was so well known in the community, Brown was asked to run for the seat in one of Nashville's predominantly black state lower house districts. Although some of the local Democratic political bosses were against her, in 1966 she won both the primary and the general elections and became the first black woman in the Tennessee legislature. She served one term, but failed in three subsequent attempts at re-election.

* * *

22 Today, Dr. Brown is still a practicing surgeon, although she grumbles that with so much paperwork, she often feels like a glorified ballpoint pen instead of a practitioner of the healing arts. Much

of her time is also spent traveling here and abroad, giving lectures on women and medicine, religion and medicine, and—a topic of particular interest to her audiences—herself.

23 The joy of her life these days is the five-year-old adopted grandson with whom she shares her home. Brown made another kind of history in 1958, becoming the first single woman to adopt a child in Tennessee, when she adopted her daughter, Lola Denise. Now she may be one of few people with an adopted grandchild.

24 She is writing her autobiography, attempting to understand the path she's taken from her "mean beginnings" as a poor, black orphan. "Where else but in America could such an incredible dream as mine come true?" She believes some of the bitterness of American blacks is misplaced. "Bitterness belongs to our parents and to their parents." When she sees people today struggling with obstacles and prejudice, she remembers one of her favorite quotes: "There's no revenge so complete as forgiveness."

25 But she realizes that she herself has been a fighter all her life because she was always trying to prove something. Now she says, "Dee Brown, you don't have to fight anymore."

HOW WELL DID YOU READ?

How carefully did you read?

1. **Dorothy Lavinia Brown is the first black woman in the South to**
   - **A** have a building named after her
   - **B** be elected to public office
   - **C** practice general surgery

2. **To earn money for college, Dorothy Brown worked as a**
   - **A** receptionist in a medical office
   - **B** maid in the homes of wealthy people
   - **C** secretary for the Methodist Women of Troy

3. **Dr. Brown did not do her surgical residency at Harlem Hospital because it**
   - **A** had too many surgical residents at that time
   - **B** wasn't ready for a female surgical resident
   - **C** employed only male physicians until just recently

Can you draw the right conclusions?

4. **Dorothy L. Brown chose to adopt a child probably because she herself**
   - **A** grew up without parents
   - **B** was raised by adoptive parents
   - **C** had had such an unhappy childhood as an orphan

5. **Brown might subscribe to the philosophy:**
   - **A** "The game of life is not so much in holding a good hand as [in] playing a poor hand well." (H. T. Leslie)
   - **B** "It is better to live well than to live long." (American Proverb)
   - **C** "Life is a progress from want to want, not from enjoyment to enjoyment." (Samuel Johnson)

6. **The last sentence in the passage implies that Dr. Brown**
   - **A** has become tired of conflict
   - **B** is comfortable with who she is
   - **C** realizes how futile fighting is

7. **The greatest advantage of Dr. Brown's early upbringing in the orphanage was probably that she**
   - **A** didn't realize that her sex and race might be handicaps
   - **B** was able to concentrate on her career goals without a family to distract her
   - **C** got free medical treatment and, therefore, became acquainted with the medical environment

8. **The *major* obstacle to Dr. Brown's career as a surgeon seems to have been her**
   - **A** age
   - **B** race
   - **C** sex

9. **As a female surgical resident, Dr. Brown probably worked**
   - **A** as hard as the male residents
   - **B** not quite as hard as the male residents
   - **C** harder than the male residents

10. **This passage can best be classified as**
    - **A** fiction
    - **B** biography
    - **C** autobiography

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. inconspicuously *(1)*
2. making sure *(1)*
3. outgoing person *(5)*
4. instrument for listening to the heart *(5)*
5. spellbound; charmed *(6)*
6. hardships *(12)*
7. work much harder than is required *(12)*
8. accepted readily; welcomed *(13)*
9. burst; broken open *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. rounds *(5)*
- **A** shots fired
- **B** professional calls
- **C** divisions of a contest

11. staff *(11)*
- **A** walking stick
- **B** rule for measuring
- **C** personnel

12. recalls *(12)*
- **A** calls back
- **B** cancels
- **C** remembers

13. bound *(12)*
- **A** resolved
- **B** confined
- **C** obligated

14. ward *(13)*
- **A** group of guards
- **B** multiple-bed room
- **C** political division

C. The **suffixes** *-ship, -ence,* and *-ance* all mean "act," "rank," or "state of." The suffix *-ship* is always used with nouns, *-ence* and *-ance* with verbs and adjectives.

Directions: The words in column II have the suffix *-ship, -ence,* or *-ance.* Write the word that fits each definition in column I.

I	II
15. act of intervening or hindering	utterance
16. rank of director	preference
17. act of challenging	reliance
18. act of putting before something in rank	interference
19. act of coming into sight	conference
20. state of belonging to	compliance
21. act of obedience	kingship
22. act of expressing by voice	membership
23. state of sovereignty	appearance
24. act of consultation; meeting	defiance
25. act of depending on	leadership

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says.

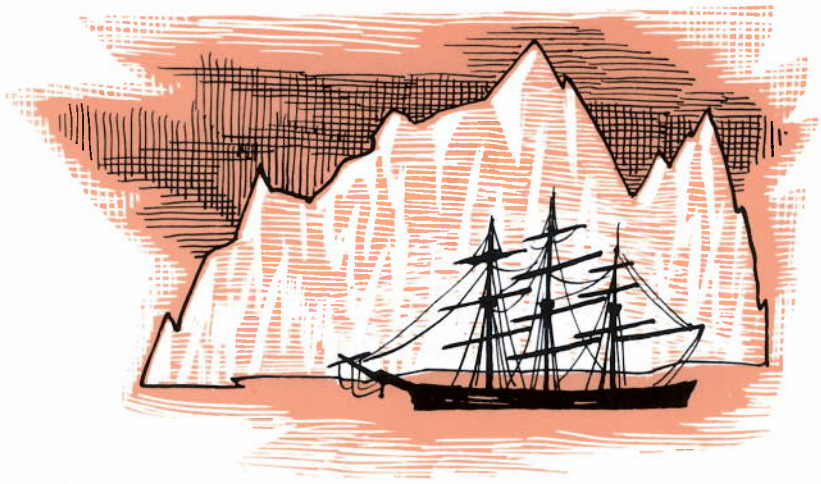
They *made do* with what they had.

Make do is an idiom meaning "manage" or "get along." This meaning is different from the meaning of *make* plus the meaning of *do.*

Directions: The idioms in column II are built on the word *up.* Write the idiom that best fits each meaning in column I.

I	II
26. prepared to fight	made up
27. facing; confronted with	put up with
28. well informed about	up in arms
29. occupied with	up for
30. busy; active	up on
31. improvised; invented	up to
32. tolerate	up and doing
33. under consideration for	up against

2



Author Unknown

RESCUE at SEA

WHO WAS THE MYSTERIOUS STRANGER, AND WHAT DID HIS MESSAGE MEAN?

1 The barque having neared the eastern portion of the Banks of Newfoundland, First Mate Robert Bruce had been on deck with the captain, taking an observation of the sun at noon. Then, some time after the captain had descended, he went below deck to chart the day's course. The first mate became absorbed in his calculations, and so did not pay much attention to the captain's cabin across from his own. When he had completed his calculations, he cried out to the captain, without looking round, "I make our latitude and longitude so-and-so—can that be right? How is yours, sir?"

2 Receiving no reply he repeated the question, glancing over his shoulder and perceiving, as he thought, the captain busy at his slate. No answer. He rose and fronted the cabin door, whereupon the figure he had mistaken for the captain raised his head and disclosed to the astonished mate the features of an entire stranger.

3 Bruce was no coward, but as he met that fixed gaze, looking directly at him in grave silence, and became assured that it was no one whom he had ever seen before, it was too much for him. Instead of stopping to question the seeming intruder, he rushed back up to the deck. There he met the captain, who had early completed his calculations and returned to the deck. Bruce was in such evident alarm that it instantly attracted the captain's attention.

4 "Why, Mr. Bruce," said the latter, "what in the world is the matter?"

5 "The matter, sir? Who is that at your desk?"

6 "No one that I know of."

7 "But there *is*, sir; there's a stranger there."

8 "A stranger? Why, man, you must be dreaming! You must have seen the steward there, or the second mate. Who else would venture down without orders?"

9 "But, sir, he was sitting in your armchair, facing the door, writing on your slate. Then he looked up full in my face; and if I ever saw a man plainly and distinctly in the world, I saw him."

10 "Him! Who?"

11 "Heaven knows, sir, I don't! I saw a man, and a man I have never seen in my life before."

12 "You must be going crazy, Mr. Bruce. A stranger, and we nearly six weeks out!"

13 The captain descended the stairs, preceding

Based on "Rescue At Sea," Best Book of Mystery Stories *edited by Pauline Rush Evans.*

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the mate into the cabin. There was nobody in the cabin! They examined the staterooms. Not a soul could be found.

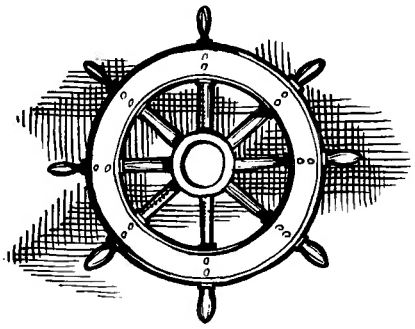
14 "Well, Mr. Bruce," said the captain, "did I not tell you that you had been dreaming?"

15 "It's all very well to say so, sir; but if I didn't see that man writing on the slate, may I never see home and family again!"

16 "Ah! Then the writing should be there still!" And the captain picked up the slate. "By heaven," he exclaimed, "here's something, sure enough! Is that your writing, Mr. Bruce?"

17 The mate took up the slate, and there in plain, legible characters stood the words, "Steer to the nor'west."

18 The captain sat down at his desk in deep thought with the slate before him. At last, turning the slate over and pushing it toward Bruce, he told him, "Write down, 'Steer to the nor'west.' "



19 Bruce complied. The captain compared the two handwritings and said, "Mr. Bruce, go and tell the second mate to come down here."

20 He came, and at the captain's request also wrote the words; so did the steward; so in succession did every man of the crew who could write at all; but not one of the various hands resembled, in any degree, the mysterious handwriting.

21 Every shadowy corner of the vessel was thoroughly searched. Not a living soul was found. The captain decided to change course as the mysterious message instructed.

22 Very shortly, a lookout reported an iceberg; then, a vessel close to it. Soon the captain's glass disclosed that the vessel was a wreck—totally dismantled and frozen fast to the ice. She proved to be a sailing ship bound eastward from Quebec with passengers on board. Water was very low and all provisions exhausted. The crew and passengers had lost all hope of being saved, and their gratitude at the unexpected rescue was proportionally great.

23 As one of the rescued passengers ascended the ship's side, the mate, catching a glimpse of the man's face, stared back in consternation—this was the same man he had seen earlier sitting at the captain's desk. Bruce informed the captain of this development.

24 When the passengers were comfortably settled, the captain approached the stranger. Handing him the slate, blank side up, he said, "I hope you will not think I am trifling with you, but I would be much obliged if you would write what I dictate: Steer to the nor'west."

25 The passenger was evidently puzzled to make out the motive of such a request; however, he complied. The captain immediately took up the slate, examined it closely, and then, stepping aside so as to conceal the slate from the passenger, turned it over and gave it to him with the other side up.

26 "You say that this is your handwriting?" said he.

27 "I need not say so," replied the other, looking at it, "for you saw me write it."

28 "And this?" asked the captain, turning the slate over.

29 The man looked first at one writing, then at the other, quite confounded. Said he at last, "What is the meaning of this? I wrote only one of these. Who wrote the other?"

30 "That's more than I can tell you, sir. My mate here says you wrote it, sitting at this desk, at noon today."

31 The captain of the wreck, who was standing nearby, exchanged a surprised look with his passenger; then he asked: "Did you dream that you wrote on this slate?"

32 "No, sir, not that I remember," answered the passenger.

33 The captain of the wreck turned to his baffled rescuer. "Captain," he declared, "this whole thing is certainly mysterious and extraordinary, and I had intended to speak to you about it. This gentleman"—pointing to the passenger—"being much exhausted, fell into a heavy sleep, or what seemed such, sometime before noon.

After an hour or two he awoke, and said to me: 'Captain, we shall be relieved this very day.' When I asked him what reason he had for saying so, he replied that he had dreamed that he was on board a barque that was coming to our rescue. He described her appearance and rig, and, to our utter astonishment, when your vessel appeared, she corresponded exactly with his description. We had not put much faith in his story; still we hoped that there might be something in it—for drowning men clutch at any encouragement. As it turned out, I cannot doubt that this was all arranged by some overruling Providence."

34 "There is not a doubt," replied the captain of the barque, "that the writing on the slate, however it may have appeared there, saved all of your lives. Before I received the message and altered my course, I was steering southwest and would never have come upon you."

35 "Another thing," added the passenger. "Everything aboard your vessel seems quite familiar; yet I am sure that I was never on it before. What, again, took place on your vessel at noon?" Thereupon Mr. Bruce related to them all the circumstances above detailed. . . .

HOW WELL DID YOU READ?

How did the author create a mood?

1. **The mood of the story can best be described as**
   - **A** skepticism
   - **B** mystery
   - **C** humor

2. **The first clue that something unusual was about to happen was that the**
   - **A** first mate was on deck with the captain
   - **B** first mate was not facing the captain's cabin, and called out without looking round
   - **C** ship was nearing the Banks of Newfoundland

Did you note the main points?

3. **Bruce was terrified at the sight of the stranger at the captain's desk because**
   - **A** the man said something to alarm him
   - **B** Bruce was a timid man
   - **C** the stranger stared at him in silence

4. **The captain decided to change course**
   - **A** as soon as he saw the message
   - **B** when he was convinced that no one on board had written the message
   - **C** as soon as the lookout spotted the iceberg

5. **The change of course led the ship to a vessel**
   - **A** trapped by an ice storm
   - **B** wrecked near an iceberg
   - **C** stranded without fuel

6. **The stranded passengers expected that**
   - **A** they would not be rescued
   - **B** some vessel would soon come their way
   - **C** Bruce's vessel would come to their rescue

7. **The "ghost" was first identified by**
   - **A** Bruce
   - **B** his own handwriting
   - **C** his familiarity with the rescue ship

8. **The characters in the story believed that the rescue was the result of**
   - **A** a lucky coincidence
   - **B** the captain's alertness
   - **C** supernatural intervention

Can you draw the right conclusions?

9. **That the "ghost" passenger actually was in two places at once is**
   - **A** seemingly proved by evidence in the story
   - **B** disproved in the story
   - **C** not suggested by any evidence

10. **The way the author tells the story suggests that he**
    - **A** believes it really happened
    - **B** believes it did not actually happen
    - **C** does not care whether it happened

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. a kind of boat *(1)*
2. observing; becoming aware of *(2)*
3. do at some risk; dare *(8)*
4. sequence; series *(20)*
5. supplies *(22)*
6. relatively *(22)*
7. amazement; dismay *(23)*
8. desire that moves one to action *(25)*
9. confused; bewildered *(29)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. fixed *(3)*
    - **A** steadily directed
    - **B** not movable
    - **C** established; settled

11. plain *(17)*
    - **A** not luxurious
    - **B** clear
    - **C** homely

12. hands *(20)*
    - **A** parts of arms below the wrist
    - **B** handwritings
    - **C** members of a crew

13. relieved *(33)*
    - **A** eased from anxiety
    - **B** set free from duty
    - **C** saved; aided

14. course *(34)*
    - **A** direction taken
    - **B** regular development
    - **C** sequence of events

C. *bi* (twice; two)
semi (half)

A knowledge of these **prefixes** will provide you with keys to the meanings of many unfamiliar words.

Directions: Use the prefix *bi-* or *semi-* to complete each word so that it fits the definition. Write the word.

15. __weekly (paper published twice a month)
16. __cycle (two-wheeled vehicle)
17. __annual (every half-year)
18. __circle (half circle)
19. __sect (cut in two)
20. __daily (every half-day)
21. __weekly (paper published every half-week)
22. __partisan (belonging to two parties)
23. __lunar (shaped like a half-moon)

D. Antonyms are words that have opposite or nearly opposite meanings.

Directions: The words in column II are antonyms of the words in column I. Write the antonym for each word in column I.

I	II
24. descended	knowing
25. interested	shifting
26. fixed	repelled
27. attracted	climbed
28. preceding	unclear
29. plain	following
30. disclosed	refused
31. complied	inattentive
32. conceal	reveal
33. baffled	hid

3

by Norman Carlisle

Michigan's Marching Dunes

SANDPILES THAT SWALLOW TOWNS

1 The pioneer town builders, studying the fine clear river, the good natural harbor, and the open expanse of ground protected by sandy hills along Lake Michigan, decided that they had found the perfect place for a city.

2 You won't find Newburyport, the town they built on Lake Michigan's shores, on any map today. The hulks of its buildings lie buried beneath tons of sand. The founders of this doomed town had fallen victim to a bizarre geological phenomenon—Michigan's marching dunes. The settlers had unwittingly built their town in one of the strange areas spotted along the eastern shore of Lake Michigan in which wind and sand are masters.

3 The sand dunes of Michigan extend along the shores of the lake for hundreds of miles. In some places they are mere modest sandpiles in a narrow band along the lake. In others they have sprawled out for miles, sometimes forming high, wall-like ridges, or creating cliffs, canyons, and valleys that resemble rugged Western terrain.

4 Nature has its own peculiar formula for making these dunes. The ingredients include a big lake, with waves washing up sand along the beach, a wind that blows at high speeds, and some kind of obstruction, as small as a clump of beach grass or as big as a cottonwood tree. Wind carries the sand against the obstruction and drops it there. As more and more sand piles up against the original obstruction, the hillock of sand becomes an obstruction in itself and collects still more sand, growing sometimes to a height of hundreds of feet.

5 In the case of most dunes, the sand buildup is slow enough to allow vegetation to take root on the sandy slopes and turn them into ordinary

Based on the original article published in Coronet, *June 1960.*

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tree-clad hills; however, in other areas an abundance of sand and strong freakish winds combine to create Michigan's marching dunes. As new sands are deposited on these dunes, they slide down the sides, causing the dunes to move. Some dunes move only a few feet annually, but others travel with astonishing rapidity. Marvin's Slide, near Benton Harbor, for instance, progressed twenty-two feet in a two-year period. These mighty sandpiles are large enough to engulf whole forests when they move into them.

6 Even after the Newburyport fiasco other ambitious town builders found it hard to accept the fearsome powers of the roving dunes. They sometimes succeeded in getting their towns built and even fought a fairly successful battle against the sands, but ultimately the dunes were triumphant. Until 1875 Singapore, Michigan, was a rip-roaring lumbering center. When the lumbering era passed, the sands took over. Today the only trace of the town is an occasional chimney or wall that comes to light in the shifting of the dunes and a plaque, in the nearby town of Saugatuck, proclaiming: "Beneath the sands near the mouth of the Kalamazoo River lies the site of Singapore. . . ."

7 Port Sheldon also saw its hopes blasted by the sand. When a group of land developers from New York and Philadelphia came to Michigan in the middle of the last century, they picked a spot north of the present city of Holland because of the excellent natural harbor which opened out into Lake Michigan through a wide channel between the dunes. They went ahead and laid out the town, building a hotel to provide for the swarms of settlers they visualized coming to Port Sheldon, and putting up a big sawmill to provide lumber for future homes.

8 The dunes began to move into the channel. The promoters brought in dredges, but still the sands came relentlessly on. In less than a year the channel was so narrowed that the discouraged promoters realized they would never be successful in getting anything much bigger than a rowboat through it. They abandoned their scheme and returned to the East. Over the years hundreds of settlers tried farming near the lake, only to have their farms enveloped. Near Muskegon is a dramatic demonstration of such failure—a vast prairie region where shifting sands have blotted out trees, houses, and fields. The most common victims are summer people who have built cottages in the dunes area. Some cottages, once set well back, are now on the edges of precipices, and the wind continues to chisel away at the base of the dunes.

9 Not everybody, however, has calmly stood by and let the sands have their way. County, state, and federal agencies, as well as private individuals, have pitted themselves against the dunes, but even the most skillful engineers have been fooled. Experimental solid walls of corrugated steel were a dismal failure. The wind soon undermined and toppled them and then covered them with sand. Other solid barriers only served to create new dunes, for the wind eddying around them piled up more sand against the obstruction.

10 The U.S. Soil Conservation Service found that tufts of beach grass planted exactly the same distance apart, in a checkerboard pattern, sometimes restrained the dunes. But when the grass died out after a few seasons, the dunes were on the march again. The dune fighters also tried laying a covering of brush, shingle fashion, over the surface of a dune, and erecting picket networks—thirteen-foot squares of eighteen-inch stakes driven into the sand. In one area, small saplings worked pretty well until some took root and sprouted leaves; soon the sand began to build up around the sapling stakes that sprouted.

11 Apparently the most effective method of tying down the dunes is to plant them with forests. Jack or red pine works best, for once they get a good start these trees develop powerful root systems and flourish in sand. Forested sand hills, scattered around many parts of Michigan, aren't even recognizable as dunes.

12 Some of the most spectacular dunes areas are now open to the public for sports, hiking, and just plain loafing. Since few people wanted such wandering real estate, the state was able to acquire some sections of duneland lakefront. A series of sandy state parks is strung along the entire length of Lake Michigan. For years before Warren Dunes became a state park, it was most troublesome. First the sand engulfed all the farms in the area and then, when the farmers gave up, attacked the resort cottages that had been built there.

13 When the state took over the 1066 acres and opened the area for the enjoyment of thousands of visitors, it discovered the key to coexistence with the dunes: the trick was not to *fight* the dunes, but to let them go where they wanted to! The Michigan Park Service cheerfully accepts the task of shoveling away tons of sand from roads and parking lots.

14 Turning the dunes into state parks may be a happy solution for most, but many cottagers are still challenging the sand. They're jacking their cottages up on piles these days, letting the sand pour under them; each year their cottages rise higher on the slopes of the advancing dunes.

15 "It has its advantages," one cottager says with a wry grin. "Improves the view, and we get a clean new yard every year."

HOW WELL DID YOU READ?

Do you know the difference?

1. **The main difference between a forested sand hill and a dune is that the**
   - **A** sand hill is higher than the dune
   - **B** dune's slopes are steeper than the sand hill's
   - **C** dune moves but the sand hill is stationary

Can you remember the details?

2. **One factor *not* necessary for making dunes is**
   - **A** steady, strong winds
   - **B** beach grass and cottonwood trees
   - **C** long, sandy beaches

3. **As a result of destruction caused by dunes, many cottagers have**
   - **A** built sturdier houses on them
   - **B** had to find ways of stopping them
   - **C** learned to "ride" them

4. **One Michigan town that has been destroyed by dunes is**
   - **A** Singapore
   - **B** Holland
   - **C** Muskegon

What did the selection imply?

5. **The chief economic value of dunes is their**
   - **A** cheap supply of sand
   - **B** attractiveness for tourists
   - **C** availability as sites for new towns

6. **The direction of a dune's movement is determined by the**
   - **A** natural obstructions in its way
   - **B** prevailing winds
   - **C** amount of sand on the beaches

What were the main ideas?

7. **Obstructions in a dune-building area cause**
   - **A** sand to collect
   - **B** a halt in the movement of dunes
   - **C** reversal of the movement of dunes

8. **A way to stop the dunes permanently is to**
   - **A** remove all buildings
   - **B** plant them with forests
   - **C** build steel fences to hold them back

9. **One effect moving dunes have had on land values is to**
   - **A** raise the price of beach property
   - **B** make dunes property cheap enough for the state to buy
   - **C** raise the price of farmland near the dunes

10. **Cottages once set back on the dunes are now on the edge because**
    - **A** shifting sands have caused them to slide
    - **B** strong winds have blown them off the top
    - **C** part of the dunes has moved away

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. strange *(2)*
2. large tract of land *(3)*
3. hindrance; something that is in the way *(4)*

4. speed *(5)*
5. swallow up *(5)*
6. total failure *(6)*
7. built a mental picture of *(7)*
8. steep cliffs *(8)*
9. getting along; living together in the same place or at the same time *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. band *(3)*
    A strip of fabric
    B group
    C narrow stretch of land

11. accept *(6)*
    A believe in
    B take when offered
    C agree to

12. blasted *(7)*
    A cursed
    B brought to ruin
    C both **A** and **B**

13. scheme *(8)*
    A plan
    B evil plot
    C diagram

14. key *(13)*
    A answer
    B instrument for operating a lock
    C musical pitch

C. The **suffixes** *-ory, -ary, -arium,* and *-orium* all mean "a place for."

Directions: The words in column II have the suffix *-ory, -ary, -arium,* or *-orium*. Write the word that fits each definition in column I.

I	II
15. place for sunbathing	auditorium
16. place for observation, often astronomical	granary
17. place where aquatic animals are displayed	laboratory
18. place for listening	planetarium
19. place where books are kept	aquarium
20. place for work, usually scientific	conservatory
21. place where criminals are confined	solarium
22. room enclosed in glass, for preserving growing plants	observatory
23. place where grain is stored	penitentiary
24. place where models of the solar system are displayed	library

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says. An *open city* is not merely a city whose gates are not closed; it is a city that is not defended from invasion in time of war.

Directions: Read the following idioms built on the word *open*. Write the idiom that best fits each sentence.

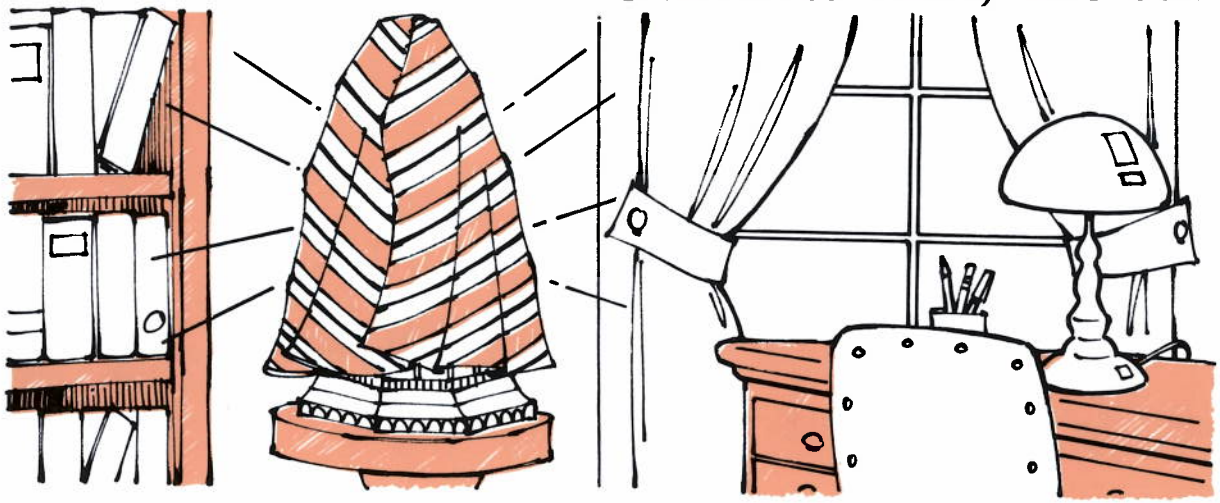
open up	open-and-shut
open to	open-door
open mind	open house
open season	open letter
open air	

25. This is an _____ case.
26. The candidate wrote an _____ to his opponent.
27. Many plants grow better in the _____ than they do indoors.
28. It takes roads to _____ new territories for settlers.
29. My decision is not final; I am _____ suggestions.
30. A person with an _____ welcomes new ideas.
31. This is _____ for deer hunting.
32. We always keep _____ for our friends.
33. The policy of equal opportunity for all nations to trade with a given nation is called an _____ policy.

4

by Margery Allingham

Give Me to Drink, Ambrosia



1 I purchased the cage for a bird which never arrived. My nephew had promised me a parrot, but a psittacosis scare in the Canary Islands, plus the authorities, combined to frustrate his generosity.

2 It was during the period between the letter from Peter and the disappointing official communication that I acquired the cage. Even in appearance it was no ordinary contraption—a lovely monstrosity, part pagoda, part miniature bandstand—and it took up the whole of the circular table in the corner of my study. I got out my Roman shawl and draped it over the cage. The brilliant stripes of color were just what that rather dull corner needed.

3 Having admired the effect, I sat down at my desk to finish some correspondence. Behind me in the room someone coughed—not a sound that could be explained away by a mouse in the baseboard or a loose window sash: it was a cough, human, and unmistakable.

4 I was halfway across the room to investigate the sound when the second thing happened.

5 "Dear-est," said a charming feminine voice with more than a trace of exasperation, "*must* you?"

6 I stood petrified.

7 "Must," replied a male voice and giggled.

8 It was the giggle which paralyzed me. It was so authentic, so obviously a private, individual giggle.

9 As I scrutinized the gaudy mound on the round table, there came another sound, the unmistakable rustling of feathers. Instantly my mind seized on an explanation, improbable enough, but better than the one I was forced to accept afterward. I whipped off the shawl fully expecting a miracle to have occurred, but, alas, the cage was just as I had last seen it, empty and rather vulgarly ornate.

10 Thoroughly alarmed, I decided to go to bed and call upon my doctor in the morning. I threw the shawl over the cage and turned to switch off the light.

11 "George—really! I might as well be married to an ape . . ."

12 The woman's voice, so charming and distinctive, arrested me, and the hairs fairly prickled on my scalp.

13 "Un-apeily married," replied the male voice with idiotic relish, and it chuckled again.

14 Now thoroughly frightened, I advanced stealthily upon the cage. Having decided that the manifestation occurred only when the cage was covered, I left the cage uncovered and passed a fitful night in my bedroom behind a locked door.

From pp. 95-103 in THE ALLINGHAM MINIBUS *by Margery Allingham. Copyright © 1973 by P & M Youngman Carter Ltd. Adapted by permission of William Morrow & Company.*

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15 The following day I could not bring myself to confide in anyone. I got out the shawl and covered the cage again.

16 At first the cage was silent. My initial feeling was one of intense relief, but this was soon followed by extreme irritation, when an odd rasping noise, like that which a parrot makes as it rubs its beak on the wood of its perch, could be heard emanating from beneath the cover.

17 I was just stretching out my hand to pull the shawl away when the voices within again commenced to speak.

18 "George, don't—be serious for once. You're not amusing, darling, you're silly."

19 "Perhaps I come from the Scilly Isles."

20 Then the woman's voice again, near breaking-point this time. "George, really, I can't stand it! You're such a fool. These incessant lunatic jokes aren't faintly funny."

21 There was a pause, followed by an explosion of partly controlled laughter.

22 "Really! . . ." There were tears in the woman's voice and a dangerous edge of hysteria. "I can't stand it any longer. I've been thinking about what I'm going to do now for months. I knew you'd drive me to it in the end. My nerves have snapped, I tell you. George, look, I've got a gun in my hand. Look at it! If I were to pull the trigger . . ."

23 "There'd be a loud report," sang the male voice, quoting evidently from some comic song.

24 "George, I'm going to—I'm going to—"

25 The answering male giggle was positively insane in its stupidity.

26 The gunshot startled me half out of my senses. There was the first sharp crack and then the faint repercussions all uncannily reproduced by that dreadful, devilish bird.

27 The scream which followed was equally convincing, but the peak of horror came afterward in that soft, broken-hearted little moan and the single murmured word, so appalling in its economy.

28 "Dead."

29 I was horrified by the tragedy I had overheard, a tragedy made even more horrible by the element of low comedy which had dominated it.

30 I decided to take the abominable cage back immediately, and I actually had my hat on when I remembered Mrs. Beckwithston's appointment. She was the sister of the Bishop of Mold, passing through London on her way to France, and I had invited her to breakfast.

31 I went into the study and looked at the cage. Uncovered, it was certainly ugly but I knew not dangerous. I steeled myself to keep it in the house an hour longer.

32 Mrs. Beckwithston was punctual. As soon as I heard her speak, my blood congealed: it was *the* voice. I should have recognized it anywhere by its timbre and the soft rolling of the *r*s. She was, I was certain, the woman whose part in a terrible tragedy I had overheard in my own study not an hour ago!

33 Breakfast was a terrible meal. I could barely speak and when I did my words sounded distrait even to myself.

34 My guest, however, was completely at her ease, chatting pleasantly about our common interests and betraying a personality that was altogether charming. Yet, at every syllable which left her sympathetic lips, I was reminded horribly of my experiences of the past two days.

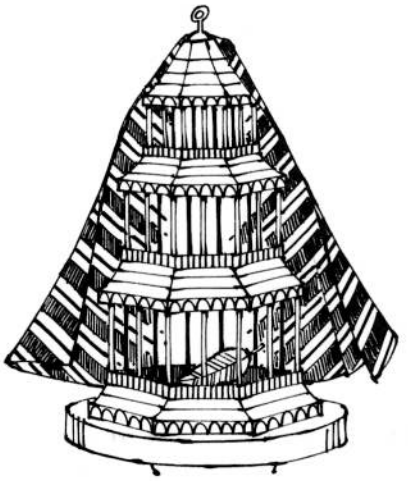
35 When at last the meal was nearly finished there was a second ring at my doorbell and Mrs. Beckwithston looked up. "That will be my husband. I hope you don't mind. I told him to come here after he picked up our tickets."

36 I felt a fine perspiration break out all over my face as my housekeeper ushered the gentleman in.

37 "My dear," said Mrs. Beckwithston to me, "this is George."

38 They must have thought me demented, for I goggled at the man. "Some—some tea?" I finally stammered.

39 "Splendid," he enthused, and, turning to his wife, threw out his hands. I knew exactly what his



voice was going to be like even before I heard it, smug, bantering, ineffably foolish, "Give me to drink, Ambrosia. . . . A nice cup of tea would do as well as anything."

40 "Darling, *must* you?" said Mrs. Beckwithston plaintively and actually laughed.

41 So did I, rather wildly, I fear.

42 At last they got up to leave.

43 "I wonder," she asked as she passed the open door of the study, "where did you get that cage?"

44 I felt the blood singing in my ears as I told her.

45 "A second-hand shop?" she exclaimed. "Well, then of course it really must be the same. . . . It is!" she said joyfully. "I recognize it by that little nick on the brass. It belonged to our poor Johnny, but we felt so wretched when he died, we couldn't bear to keep it. He was the cleverest bird! He used to imitate George and me until you'd really think it was ourselves speaking."

46 They stood together, two respectable middle-aged persons, eulogizing their dead pet. Mrs. Beckwithston sighed over his memory.

47 "Ah, poor Johnny, he had only one fault," George reminisced. "You remember, Marion?"

48 "I do," she said tolerantly. "It seems absurd to say it of a parrot, but Johnny really was half-human. He was—there really is no other word for it—such a dreadful *liar,* poor darling, that I'm sure he hasn't gone to heaven."

HOW WELL DID YOU READ?

What was the author's purpose?

1. The author's purpose in this story was to

A entertain
B inform
C persuade

Can you draw the right conclusions?

2. From the material in the story, the reader can conclude that "Johnny"

A made up the dialogue that ended in the shooting
B saw Mrs. Beckwithston shoot George
C repeated a dialogue he'd heard on the radio

3. Which characteristic of George's seemed to provoke the "tragic event"?

A His inability to hear well
B His peculiar sense of humor
C His coarse manners

4. Which would be the best alternative title for this story?

A The Bishop's Sister Takes Tea
B The Haunted Cage of Psittacosis
C Murder Most Fowl

5. In which literary category could this story best be placed?

A Science fiction
B Mystery
C Autobiography

How carefully did you read?

6. The narrator bought the cage for a

A parrot purchased on a trip
B canary with psittacosis
C bird that never arrived

7. The narrator was first alerted to the unusual situation of the cage by a

A human cough
B woman's voice
C loud gunshot

8. The narrator identified the Beckwithstons from their

A appearances
B names
C voices

9. When the narrator heard Mrs. Beckwithston's voice, she assumed that this was the woman who

A had once owned the cage
B had murdered George
C had been speaking from the next room

10. The Beckwithstons positively identified the cage from the

A broken cage door
B nick in the brass
C unusual design

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. defeat *(1)*
2. carefully examined *(9)*
3. unlike others *(12)*
4. slyly; secretly *(14)*
5. coming forth *(16)*
6. continual; nonstop *(20)*
7. hateful; detestable *(30)*
8. thickened *(32)*
9. highly praising *(46)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. dull *(2)*
- **A** stupid; mentally slow
- **B** blunt; not pointed
- **C** plain; boring

11. trace *(5)*
- **A** bit; small amount
- **B** footpath; trail
- **C** harness strap

12. relish *(13)*
- **A** characteristic flavor
- **B** small quantity
- **C** delight; enjoyment

13. crack *(26)*
- **A** explosive sound
- **B** witty remark
- **C** narrow break

14. peak *(27)*
- **A** visor of a cap
- **B** high point
- **C** mountaintop

C. The **root** *spect* comes from the Latin *spectare,* meaning "to behold" or "to see." The roots *scrip* and *scrib* come from the Latin *scribere,* meaning "to write." These roots are found in such English words as *respect* and *prescription.*

Directions: Use the roots *spect, scrip,* and *scrib* to complete each word so that it fits the definition. Write the word.

15. _____acles (aids to seeing; eyeglasses)
16. post_____t (something written afterward)
17. de_____e (to tell or write about)
18. pro_____ (something looked forward to)
19. _____ator (one who watches something)
20. circum_____e (draw a line around)
21. retro_____ (a looking back on)
22. _____acle (something to look at)
23. manu_____t (something written by hand)

D. Synonyms are words that have the same or nearly the same meaning. *Knowledge* may be called *acquaintance, science, wisdom,* or *education.* All of these words are synonyms, but each has a different shade of meaning.

Directions: In column II there are five synonyms for *work* and five synonyms for *look.* Write the synonym that best fits each definition in column I.

I	II
work	
24. what engages one's time; profession	drudgery
25. work that is hard, exhausting	occupation
26. work that is hard, menial, or unpleasant	toil
27. work that requires active use of strength	business
28. concern or responsibility; commercial practice	exertion
look	
29. look into; examine critically	contemplate
30. look suddenly and briefly	stare
31. look at and think about intently	watch
32. look attentively; observe	glance
33. look fixedly; gaze intently	inspect

5

KILLERS WALKED FREE,
THIEVES GREW RICH – IT WAS . . .

ORGANIZED CRIME

EIGHTEENTH CENTURY STYLE

by Laurence Thompson

1 It is hard to imagine a large city without police officers, but such was the situation in London in the early part of the eighteenth century. There was no organized police force to apprehend criminals. There were public watchmen, or Charlies, as they were called, but they were generally feeble old men, unfit for more strenuous assignment than calling out, "Past ten o'clock and a cold, frosty morning."

2 There were also constables appointed to keep the peace. From as far back as 1252, constables had been appointed for each parish in England. The position of constable was an honor, given only to trustworthy men.

3 The constable was unpaid, however, and not expected to do more than carry out the law in country towns and villages where the commonest crime was likely to be the theft of someone's wash. In London more serious crimes were committed; as the work of the constable became more difficult and dangerous, the men who should have done it paid others, less respectable and less efficient, to do it for them.

4 It was part of the constable's duty to raise the "hue and cry" after an escaping criminal. On hearing the hue and cry, all passersby were supposed to join in the pursuit, but in practice, not many passersby could be persuaded to help. It was too dangerous a task, and the constable was unarmed. Anyway, in the squalid surroundings that criminals frequented, the passersby were generally on the fugitive's side.

5 Within the City of London lay another city, in which a criminal was safe. It was a city of poverty, tightly packed with wood-and-stone hovels overhanging narrow, filthy courtyards. The fleeing criminal would dodge from court to court through the maze of twisting streets, finally ducking into a house or climbing across the sloping roofs. Meanwhile friends did their best to mislead, trip, or even knife the handful of "thief takers" in pursuit.

6 Henry Fielding, the famous novelist who was also a London magistrate, once made a night raid on two known hideouts in this city-within-a-city; he found seventy men, women, and children packed away in a few tiny, stinking rooms. All of these people, including little children of five and six who were trained as pickpockets, were wanted for crimes.

Adapted from The Story of Scotland Yard *by Laurence Thompson.*
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7 Conditions like these bred more criminals. One of the typical cases was that of Jack Sheppard, whose execution in 1724 was watched by two hundred thousand people. Sheppard, the son of honest working people, was an apprentice in a respectable trade. He ran away from it because he fancied that he had been ill-treated, and soon found it easy to make more money by thieving than his father had done by a lifetime of honest work.

8 In Sheppard's day highwaymen committed robberies in broad daylight, in sight of a crowd, and rode solemnly and triumphantly through the town without danger of molestation. If they were chased, twenty or thirty armed men were ready to come to their assistance. Murder was an everyday affair, and there were many people who made heroes of the murderers.

9 So young, tight-lipped Sheppard, still in his teens, only five feet four inches tall, and very slender and pale, became a petty thief, then a highwayman, with no future to hope for except the gallows or a rival's bullet.

10 Working behind most of the thieves were the receivers of stolen property, who had organized the thieves and rogues into gangs. One gang robbed on the main roads into London, one covered the churches, and one covered entertainments and public functions. One of the most notorious receivers, Jonathan Wild, set up a special brigade that would find employment as servants and then pilfer from the household or open the doors at night for other robbers to enter. He had a staff of mechanics for altering watches and jewelry, warehouses to store the loot, and a sloop to convey certain stolen goods to the Continent, where they could be sold in safety.

11 Other stolen property he advertised as "recovered property" and sold back to the original owners; or, if they did not claim it, he openly sold it elsewhere. His activities became so widespread that special legislation was passed to make the receiver of stolen goods an accessory to the theft. Wild got around this by opening a "lost-property office," at which those who had had goods stolen might report their loss. Wild charged a fee for making inquiries about a theft—and he charged yet another fee when he returned the goods that he claimed to have found.

12 The authorities might have taken stronger steps against Wild had he not been so useful as a thief taker. He knew every criminal, as he employed most of them himself. Whenever it suited his purpose, he would hand a man over to the authorities for hanging. This brought him even more money, for a reward was generally offered for wanted criminals. It also provided Wild with a very effective means of controlling his men. Every man knew that if he disobeyed the boss he would be betrayed and would quickly find himself on the gallows.

13 Jack Sheppard, who had robbed for Wild and killed honest men so that Wild might grow rich, was one of those who fell out with the boss and was duly betrayed to the authorities.

14 While he was awaiting trial and certain hanging, Sheppard broke out of Newgate Prison. He accomplished this by getting rid of the irons with which his wrists and ankles were shackled, cutting through a double grille of oak and iron bars, descending twenty-five feet by a knotted sheet and blanket, and climbing a twenty-two-foot wall. Before he reached freedom he was caught, and subsequently he was tried and condemned. He escaped again, however, and walked openly about the underworld city, where his ever ready pistols discouraged captors.

15 When he was captured a third time, he was taken to a stronger part of the prison known as the Castle, and there chained more securely than before. A third time he freed himself of his manacles. He snapped the floor chains and climbed the chimney after having removed a heavy iron bar from it. Forcing the heavily bolted doors of several chambers, he found himself on the upper levels with a twenty-foot drop to the next roof. He coolly retraced his steps, removed the blanket from his cell, and triumphantly swung across to safety.

16 But though he might escape from prisons and chains, he could not escape from himself. At large again, he had no place to go except to his usual drinking dens, where he was finally captured. This time the gallows claimed him.

17 It was novelist Henry Fielding who finally thought of equipping regular patrols with arms and uniforms and sending them out to police the streets of London. His half brother, Sir John Fielding, organized these first "patroles," groups of well-mounted men armed with cutlasses, pistols, and truncheons.

18 At first these groups were financed by rich citizens who were willing to pay for their security, but later they were taken over by the government, and their numbers increased. The Fieldings' "patroles" became a real police force.

HOW WELL DID YOU READ?

How careful was your reading?

1. **The first constables to be appointed were**
   - **A** respected citizens
   - **B** paid officials
   - **C** untrustworthy men

2. **Once a man became a highwayman, his life would be**
   - **A** financially secure
   - **B** long and adventurous
   - **C** short and violent

What reasons were given?

3. **Most passersby did not join in the hue and cry because they were**
   - **A** on the criminal's side
   - **B** afraid of getting hurt
   - **C** both **A** and **B**

4. **Wild made his money by**
   - **A** solving cases of theft
   - **B** searching for lost property
   - **C** pretending to recover lost property

5. **The authorities let Wild alone because**
   - **A** he turned wanted criminals over to them
   - **B** he had bribed many officials
   - **C** no one was brave enough to go after him

How well can you reason?

6. **At the height of his career Jack Sheppard was probably**
   - **A** unknown
   - **B** well received all over London
   - **C** greatly admired by underworld figures

7. **Sheppard was finally hanged because he**
   - **A** had stopped trying to escape from prison
   - **B** could not lead a different kind of life
   - **C** foolishly trusted Wild

8. **Henry Fielding's action to decrease London crime probably resulted from his**
   - **A** search for material to use in his novels
   - **B** being a London magistrate
   - **C** having personal interest in the victims

What did the writer think?

9. **The writer's attitude toward Sheppard and Wild is one of**
   - **A** sympathy for both
   - **B** sympathy for Sheppard; dislike for Wild
   - **C** indifference to both

10. **London's crime rate was high because**
    - **A** "Charlies" did not do their jobs well
    - **B** the public was indifferent
    - **C** an honest trade was hard to learn

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. take into custody; arrest *(1)*
2. sordid; wretched *(4)*
3. small, miserable dwellings *(5)*
4. civil officer *(6)*
5. one who works at learning a trade *(7)*
6. annoyance; interference *(8)*
7. trifling; insignificant *(9)*
8. steal *(10)*
9. following; afterward *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. commonest *(3)*
- **A** most usual
- **B** most vulgar; coarse
- **C** least distinguished

11. supposed *(4)*
- **A** expected
- **B** merely imagined
- **C** thought to

12. court *(5)*
- **A** uncovered space surrounded by buildings
- **B** group surrounding a king
- **C** place where trials are held

13. covered *(10)*
- **A** extended over
- **B** dealt with; was responsible for
- **C** protected; shielded

14. certain *(14)*
- **A** confident
- **B** inevitable; sure to happen
- **C** unquestionable

C. The **prefixes** *mono-* and *uni-* both mean "one" or "single." Usually only one of these prefixes can be used with a specific word.

Directions: Decide which prefix goes with each word below to give it the sense of "one" or "single." Add the prefix and write the word.

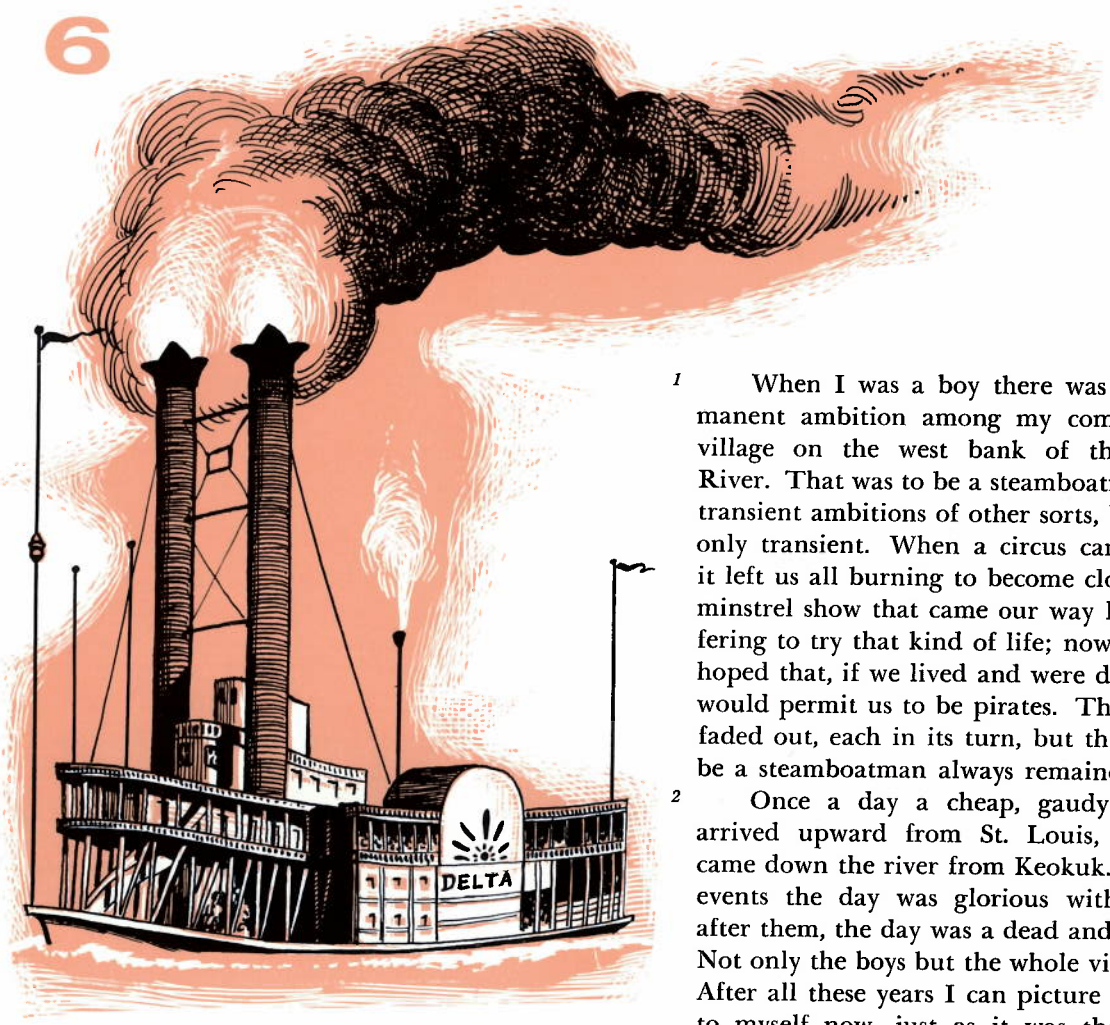
15. lateral
16. tone
17. corn
18. verse
19. cycle
20. gram
21. log
22. form
23. syllable

D. Antonyms are words that have opposite or nearly opposite meanings.

Directions: The words in column II are antonyms of the words in column I. Write the antonym for each word in column I.

	I	II
24.	strenuous	impracticable
25.	feeble	powerful
26.	trustworthy	avoided
27.	feasible	easy
28.	squalid	spacious
29.	frequented	pardoned
30.	narrow	dishonorable
31.	effective	magnificent
32.	condemned	danger
33.	security	inefficient

6



OH, TO BE A STEAMBOATMAN

by Samuel Langhorne Clemens

1 When I was a boy there was but one permanent ambition among my comrades in our village on the west bank of the Mississippi River. That was to be a steamboatman. We had transient ambitions of other sorts, but they were only transient. When a circus came and went, it left us all burning to become clowns; the first minstrel show that came our way left us all suffering to try that kind of life; now and then we hoped that, if we lived and were deserving, God would permit us to be pirates. These ambitions faded out, each in its turn, but the ambition to be a steamboatman always remained.

2 Once a day a cheap, gaudy packet boat arrived upward from St. Louis, and another came down the river from Keokuk. Before these events the day was glorious with expectancy; after them, the day was a dead and empty thing. Not only the boys but the whole village felt this. After all these years I can picture that old time to myself now, just as it was then: the town drowsing in the sunshine of a summer's morning—the streets empty, or pretty nearly so, and one or two clerks sitting in front of a Water Street store, their splint-bottomed chairs tilted back against the wall, their chins on their breasts, their hats slouched over their faces, asleep; a sow and a litter of pigs are loafing along the sidewalk doing a good business in watermelon rinds and seeds. There is no one to listen to the peaceful lapping of the wavelets against the wharf that juts out into the river. Unnoticed, the great Mississippi, the majestic, the magnificent Mississippi, rolls its mile-wide tide along, shining in the sun.

3 Presently a film of dark smoke appears on the river far in the distance; instantly a Negro drayman, famous for his quick eye and prodi-

From LIFE ON THE MISSISSIPPI *by Samuel L. Clemens.*

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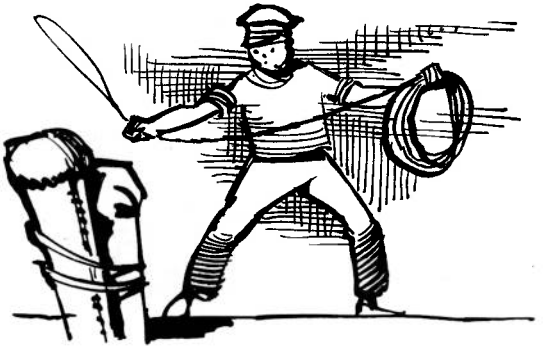
gious voice, lifts up the cry, "S-t-e-a-m-boat a-comin'!" and the scene changes. The clerks wake up, there is a furious clatter of drays, and all in a twinkling the dead town is alive and moving—drays, carts, men, boys, all go hurrying from many quarters to a common center, the wharf. Assembled there, the people fasten their eyes upon the approaching steamboat as upon a wonder they are seeing for the first time.

4 And the boat is rather a handsome sight, too. She is long and trim and pretty. She has two tall, fancy-topped chimneys with a gilded device of some kind swung between them; the paddle boxes are gorgeous with a picture above the boat's name. The decks are fenced and ornamented with clean white railings, and a flag flies gallantly from the jack staff. Great volumes of smoke are rolling and tumbling out of the chimneys. The upper decks are black with passengers; the captain stands by the big bell, calm and imposing, the envy of all.

5 My father was a justice of the peace, and as a boy I supposed he possessed the power of life and death over all men and could hang anyone who offended him. This was distinction enough for me as a general thing, but the desire to be a steamboatman kept intruding nevertheless. I first wanted to be a cabin boy, so that I could parade out with a white apron on and shake a tablecloth over the side where all my old comrades could see me. Later I thought I would rather be the deckhand who stood on the edge of the stage plank with a coiled rope in hand, because he was particularly conspicuous. But these were only daydreams, much too heavenly to be contemplated as real possibilities.

6 By-and-by one of the boys from Hannibal went away and was not heard of for a long time. At last he turned up again—as apprentice engineer or "striker" on a steamboat. This shook the bottom out of all my Sunday-school teachings. That boy had been notoriously worldly and I just the reverse; yet he was exalted to this eminence and I left in obscurity and misery.

7 This fellow would always manage to have a rusty bolt to scrub while his boat tarried at our town, and he would sit on the inside guard and scrub it, where we could all see him and envy him and loathe him. And whenever his boat was laid up he would come home in his



blackest and greasiest clothes, so that nobody could help remembering that he was a steamboatman.

8 He used all sorts of steamboat technicalities in his talk, as if he were so used to them that he forgot common people could not understand them. He would speak of the "labboard" side of a horse in an easy, natural way that would make one wish he were dead. And he was always talking about "St. Looy" like an old citizen. He would refer casually to occasions when he was "coming down Fourth Street" or when he was "passing by the Planter's House," or when there was a fire and he took a turn on the brakes of "the old Big Missouri"; and then he would go on and lie about how many villages the size of ours were burned down there that day. Two or three of the boys had long been persons of consideration among us because they had been to St. Louis once and had a vague general knowledge of its wonders, but their day of glory was over now. They lapsed into a humble silence and learned to disappear altogether when the ruthless cub engineer approached.

9 This fellow had money, too, and hair oil. He wore a leather belt and used no suspenders and sported an ignorant silver watch and a showy brass watch chain. If ever a youth was cordially admired and hated by his comrades, this one was. No girl could withstand his charms; he "cut out" every boy in the village.

10 When his boat blew up at last, it diffused a tranquil contentment among us such as we had not experienced for months. But when he returned home the next week, alive and renowned, and appeared in church all battered up and bandaged, a shining hero, stared at and

wondered over by everybody, it was worse than it had ever been.

11 This creature's career could produce but one result, and it speedily followed. Boy after boy managed to get on the river. The minister's son became an engineer. The doctor's and the postmaster's sons became "mud clerks"; the wholesale liquor dealer's son became barkeeper on a boat; four sons of the chief merchant and two sons of the county judge became pilots. Pilot was the grandest position of all. The pilot, even in those days of trivial wages, drew a princely salary—from a hundred and fifty to two hundred and fifty dollars monthly—and was required to pay no board; two months of his wages would equal a preacher's annual salary.

12 Those of us who remained at home were disconsolate . . . we could not get on the river . . . our parents would not let us go. So, by-and-by, I ran away. I said I would never come home until I was a pilot and could come in glory.

HOW WELL DID YOU READ?

What did the author say?

1. **The author's boyhood desire was to**
   - **A** be a steamboat captain
   - **B** have any job on a boat where the other boys would see him
   - **C** be a pilot and nothing else

2. **The boys were happy when the cub engineer's boat blew up because**
   - **A** they were eager for him to come back to town
   - **B** it caused a lot of excitement in town
   - **C** they had envied him his job on a steamboat

How well can you reason?

The following are ideas that Mark Twain had during his youth or at the time he wrote the story, or both. On the basis of the information given in the story and the way the story is written, write **Y** for *youth,* **L** for *later,* or **B** for *both.*

3. The best way to earn a living is to be a steamboatman.
4. A steamboat is a handsome thing.
5. The Mississippi is magnificent and wondrous.
6. A justice of the peace has the power of life and death over all men.
7. The comrade who became an apprentice on a steamboat did not truly deserve the job.
8. A pilot's pay was excellent.
9. The apprentice engineer was amusing.

Can you see the author's purpose?

10. **Mark Twain wrote this story to**
    - **A** convince his reader
    - **B** entertain his reader
    - **C** inform his reader

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. temporary *(1)*
2. flashy *(2)*
3. enormous *(3)*
4. coming without being invited *(5)*
5. clearly visible *(5)*
6. high position *(6)*
7. merciless *(8)*
8. spread throughout *(10)*
9. sad *(12)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. burning *(1)*
    - **A** shining
    - **B** ardently wishing
    - **C** very hot

11. furious *(3)*
    - **A** unrestrainedly boisterous
    - **B** fiercely violent
    - **C** enraged

12. device *(4)*
    A mechanical invention
    B motto or emblem
    C plan

13. day *(8)*
    A 24-hour period
    B period from dawn to sundown
    C time

14. sported *(9)*
    A played
    B showed off
    C joked

C. *ist* (one who practices or believes in)
ism (practice of or belief in)
istic (pertaining to practice of or belief in)

The **suffixes** above may be used with many English words, including

individual	real
terror	national
ideal	

Directions: Combine each word above with the suffix *-ist, -ism,* or *-istic* to form a word that best fits each sentence.

15. One who sees things as they actually are is a _____.
16. People who are excessively devoted to their country can be described as _____.
17. The _____ believes in personal freedom and personal enterprise.
18. Behavior or thought based on things as they should be is _____ behavior or thought.
19. One who views things as they actually are is facing life with _____.
20. A _____ is one who believes in using intimidation as a weapon.
21. The _____ is often regarded as an extremely impractical person.
22. A person who makes his own rules is extremely _____.
23. A _____ is more interested in his own country than in others.
24. Acting on high principles shows that one has _____.
25. The guerrilla forces believed they could use _____ to achieve their goals.

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says.

His expression *gave* him *away.*

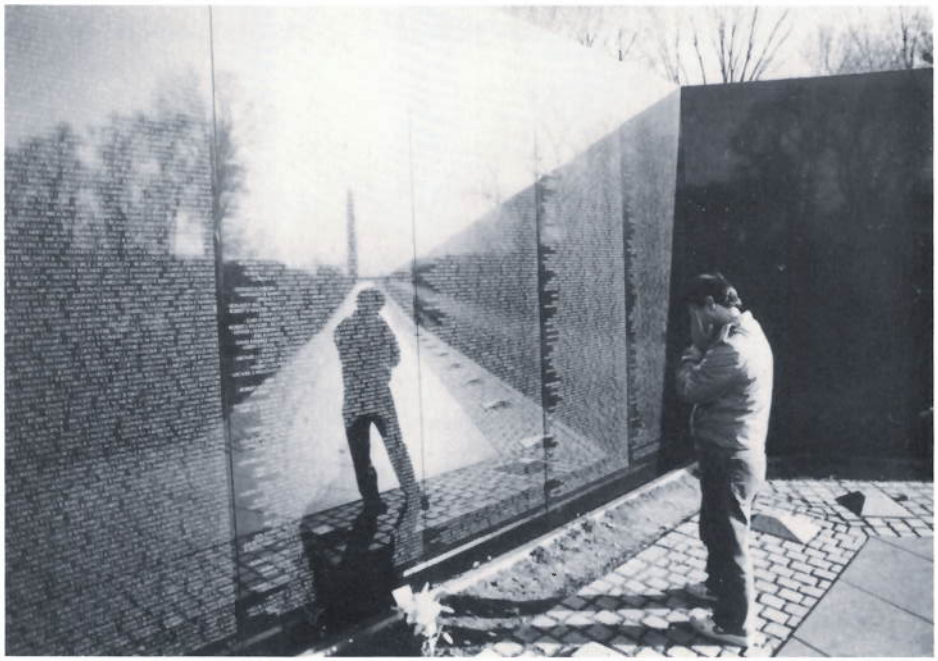
Give away is an idiom meaning "betray" or "reveal." This meaning is different from the meaning of *give* plus the meaning of *away.*

Directions: The idioms in column II are built on the word *give.* Write the idiom that best fits each meaning in column I.

I	II
26. emit; issue	give and take
27. surrender to persuasion	give back
28. hand over; transfer	give off
29. surrender; abandon	give in
30. cause to think	give out
31. exchange on an equal basis	give over
32. cause to be known; make public	give to understand
33. return; restore	give up

Opening Up the Earth

by Lisa Yount



AP/Wide World Photos

Close-up of the Vietnam Veterans Memorial, with a reflection of the Washington Monument

1 The crisp, sunny weather had attracted many people to the Washington Mall that November day in 1980. Some wandered indolently through the lovely park while others sat on the grass, talking or picnicking. A family was tossing a Frisbee. Most onlookers would have seen the mall that day as a cheerful, casual place of entertainment.

2 One young woman saw something different. In her imagination, Maya Ying Lin saw the earth before her open gently, like a pair of hands spreading apart. She pictured a V-shaped rift forming in the land. The V would be ten feet high at its apex, its arms sloping softly down to meet level ground. The ground-level spot at the apex of the V was a quiet protected place where people could be alone with their thoughts.

3 When Maya had this vision, she was walking on the mall with two of her classmates. All three were seniors at Yale University, studying to become architects, and they had decided to visit the nation's capital because of their class on funerary architecture. The instructor in this class had explained that a memorial was planned for the Americans who had died in the Vietnam War. A select jury of architects and sculptors would choose the design for the memorial from among those entered in an open competition. The instructor then assigned his students to design a memorial for the class. Only Maya would later decide to enter the actual competition. Maya Lin and her classmates hoped that visiting the site on the Washington Mall would give them inspiration for their designs.

4 Maya's classmates may have pictured a statue or a building, perhaps something as grand as the nearby Lincoln Memorial with its Greek columns or the Washington Monument's spire, but when Maya looked at the beautiful landscape, she realized she didn't want to alter it. She wanted a design that would become an integral part of the landscape rather than dominate it—and she saw the V-shaped opening in the earth.

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5 To be sure, a cut in the earth was a violent act, just as a war was, but in her design for the memorial, Maya pictured the cut as healed. She wanted to line the sloping V with black granite so it would appear that the dark earth had petrified into a smooth, shiny surface. Carved into the granite would be the names of the Americans who had been lost in the war.

6 Returning to Yale, Maya worked out the details of her design and finally made a drawing that pictured the completed monument. Then she entered her design in the competition.

7 To her amazement, it won, but people acquainted with Maya were less amazed. So much talent was not surprising in someone who had come from such a talented family. Well-known in China for many years, the Lins had left that country in the late 1940s and started new careers in the United States. At Ohio University, Maya's father was dean of the School of Fine Arts, and her mother a professor of Oriental and English literature.

8 Maya herself had grown up in Athens, Ohio, and thought of herself as an American. Although unable to write or speak Chinese, she had learned much about China from her family. Her direct, simple design reflected the ideals of ancient Chinese philosophy.

9 Winning the competition for the Vietnam Veterans Memorial made Maya Lin famous overnight. It was an exciting time—and a frightening one, for while many people praised her work, others spoke out just as strongly against it.

10 Some of the divided feelings about the memorial grew out of divided feelings about the war itself. During the war, Americans had argued heatedly over whether their country's involvement in it was right or wrong, and Maya quickly learned that the bitter feelings had remained.

11 Some soldiers, for example, had felt betrayed by what they saw as America's lack of support for the war. Some veterans now apparently felt betrayed by the memorial, too, one angrily calling it "a black gash of shame."

12 Faced with such comments, Maya pointed out that the judges of the contest had stipulated that the memorial design be apolitical. She herself had also wanted to avoid a political statement about the war. She knew little of the conflict, she said, for she had been only twelve years old in 1975, when America's participation in the war ended.

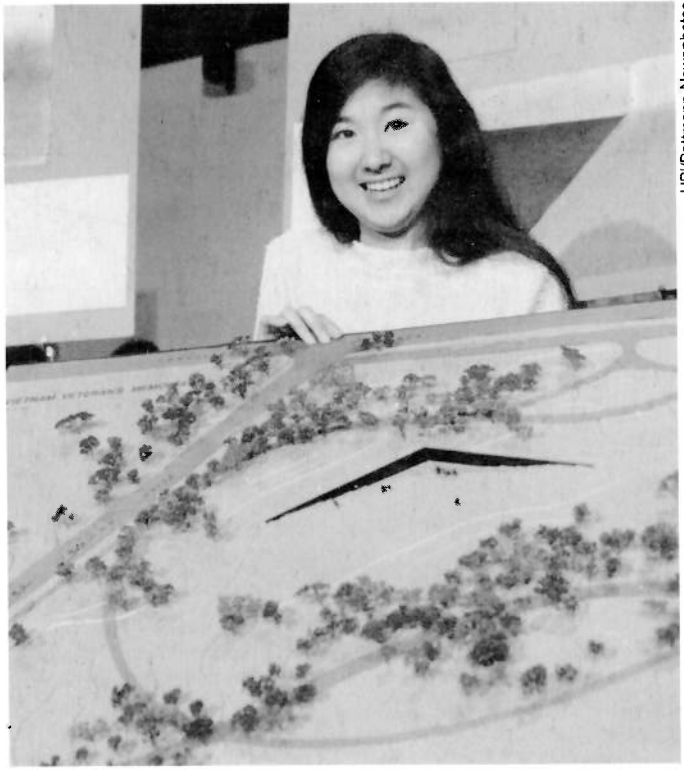
13 "To remember the veterans, that's all I wanted to do," she explained. "The most beautiful way to do it is often the most simple."

14 That simplicity, however, caused another part of the problem: Maya's design did not look like memorials for other wars. It did not have waving flags or huge statues of soldiers. People could not decide what the design was supposed to "mean." Many were not even sure whether it should be called a building or a sculpture.

15 Maya attempted not to waste time arguing about what the memorial symbolized, and, instead, helped the people who were preparing to build it. Shortly after her graduation in 1981, she moved to Washington, D.C., to be a consultant on the memorial's construction.

16 Maya watched over every detail of the building, making sure, for example, that the arms of the V pointed both to the Lincoln Memorial and to the Washington Monument. When the arms proved too short to contain the names of all the Americans who had died or were missing in Vietnam, she made them longer.

17 The hardest part of Maya's work was learning to live with changes that others made. Trying to



UPI/Bettmann Newsphotos

Maya Ying Lin with her rendering of the war memorial and site, 1981

ease controversy, the memorial's sponsors added some familiar elements to balance its strangeness: a flag and a statue of soldiers. Maya was angry at first, but she agreed to go along with the changes.

18 Two years after Maya Ying Lin pictured the earth opening up on that sunshiny day on the Washington Mall, her vision became a reality. Her work on the memorial finished, Maya went on to other projects.

19 Meanwhile, the Vietnam Veterans Memorial attracts thousands of visitors every year. People still disagree about it, for it is a place of reflection in more than one sense. Just as visitors see their images reflected in the granite's shiny surface, they see a mirror of their thoughts in the memorial itself. Some think its V shape suggests a "V for victory," while others see in it a reminder of the V sign that protesters against the war made with their fingers. A few have seen the shape of the Chinese character that means "humanity."

20 Some visitors to the memorial fought in the war themselves, while others come to remember lost friends, relatives, or loved ones. When they see familiar names on the wall, many touch the names and cry. As they do so, they see a reflection of their own arms reaching back toward them like a ghostly appeal from a world beyond the granite wall.

21 The "opening in the earth" where the sunny mall world and the dark world meet is a place of peace—and that is what Maya Ying Lin intended.

HOW WELL DID YOU READ?

How carefully did you read?

1. The Vietnam Veterans Memorial was built in
- **A** Washington, D.C.
- **B** Seattle, Washington
- **C** Athens, Ohio

2. Maya and her classmates first visited the Mall
- **A** to fulfill a requirement for their landscape architecture class
- **B** as part of a sightseeing tour of all Washington memorials
- **C** for the express purpose of seeing the Vietnam memorial site

3. During the Vietnam War, Maya Lin was
- **A** an antiwar protester in Ohio
- **B** a child living with her parents
- **C** an architecture student at Yale

4. According to the article, some people didn't like Maya's design because it
- **A** suggested too much sympathy for the war
- **B** didn't look like other war memorials
- **C** was too complicated and hard to build

5. Maya explained that her main purpose in designing the memorial was to
- **A** express her feelings about the Vietnam War
- **B** create a structure that people would want to visit
- **C** remember the veterans of the Vietnam War

What difference did it make?

6. An important result of the controversy over the memorial was that
- **A** the names of lost soldiers would be engraved on the granite
- **B** its color was changed from black to white
- **C** a flag and a statue of soldiers were added

Can you draw the right conclusions?

7. From the information in the article, the reader can conclude that designing the memorial probably
- **A** helped Maya's career by making her famous
- **B** hurt Maya's career because it caused controversy
- **C** had no effect on Maya's career, one way or the other

8. From the information in the article, the reader can conclude that the Vietnam Memorial turned out primarily to be a place for
- **A** peace and reflection
- **B** war demonstrations, pro and con
- **C** veterans to gather and hold meetings

9. How did the author seem to feel about Maya's design for the Vietnam Memorial?
- **A** She seemed to like the design.
- **B** She seemed to dislike the design.
- **C** She seemed completely neutral about the design.

Did you gain insight into the character?

10. The article presented Maya Ying Lin as a woman who

A enjoyed controversy and discussion
B was willing to listen and compromise
C would not give in to the opinions of others

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. lazily *(1)*
2. uppermost point; tip *(2)*
3. associated with death or burial *(3)*
4. tapered and pointed part *(4)*
5. necessary; essential to being complete *(4)*
6. control; exert the most influence over *(4)*
7. deep cut *(11)*
8. specified *(12)*
9. without political significance *(12)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. crisp *(1)*
A curly; wavy
B brittle; easily crumbled
C frosty; snappy

11. capital *(3)*
A net worth
B seat of government
C upper-case letter

12. line *(5)*
A cover with lines
B form a line along
C cover the inner surface of

13. bitter *(10)*
A angry and unhappy
B bad tasting
C unpleasantly cold

14. ease *(17)*
A maneuver carefully
B reduce in intensity
C make less difficult

C. The **suffixes** *-able* and *-ible* mean "capable of," "capable of being," or "causing."

Directions: Decide the meaning of *-able* or *-ible* in each word below. Write *capable of, capable of being,* or *causing.*

15. readable
16. convertible
17. curable
18. comfortable
19. horrible
20. pleasurable
21. portable
22. changeable
23. terrible
24. alterable
25. deductible

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says.

I am *on to* his tricks.

On to is an idiom meaning "aware of." This meaning is different from the meaning of *on* plus the meaning of *to.*

Directions: The idioms in column II are built on the words *on* or *off.* Write the idiom that best fits each meaning in column I.

I	II
26. not continuously	and so on
27. prompt	on and off
28. put off! take off! remove!	on and on
29. continuously; at great length	on time
30. go away! depart!	see off
31. and more like the preceding	off with
32. in error; mistaken	off with you
33. watch departure	off the mark

8

A TRAIL OF ANCIENT VIOLENCE LEADS TO

BURIED TREASURE

by Thomas Penfield

Reprinted from The Milwaukee Journal.
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1 You push the spade into the ground again, listening intently for the metallic sound that will tell you you've found it. Around you, pyramids of freshly turned earth rise higher as you probe deeper and deeper for the treasure you are certain is there. You have been digging half the night, and your back aches like fury.

2 You crawl out of the pit exhausted, collapse on the warm earth, and watch the moon floating lazily across the cloudless sky and the wind rustling lightly through the leaves. You listen to the strange night sounds—the scurrying of a rat, the swishing flight of a night bird, the baying of dogs in the distance. The night envelops you with shadowy, shapeless forms.

3 What was that? Your blood tingles with fear and excitement. Could you have been followed, in spite of the numerous precautions you have taken to safeguard your secret? You crouch to the earth and listen with concentration, but all you can hear is the thump, thump, thump of your own heartbeat. You finally realize that your imagination has been playing tricks on you. You go back to your work.

4 Dig, dig, dig! There is treasure below—gold in an iron chest! Even as you work, in your mind you are tracing once more the strange events that brought you to this lonely spot.

5 Seventy-five years ago a stagecoach, the heavily guarded treasure express hauling the week's bullion from a gold-mining camp to the city of Sacramento, had clattered down its regular route, a scant half mile from the scene of your present feverish digging. On this particular trip the stage driver was none other than weather-beaten old Gene Locke, who had forgotten more about staging than most men ever knew. Riding on the box beside him was the king of the "shotgun messengers," Charley Byers, whose twinkling blue eyes and perpetual smile revealed little of the ferocity that could be unleashed in him when he was aroused.

6 Inside the coach, astraddle the iron treasure chest, sat two more guards, armed to the teeth. The array of gun talent was calculated to discourage the boldest highwayman, and, indeed, it had for many months. But there is always someone who will tackle anything if the reward is sufficient. Such was the case on this day; the stage was headed pell-mell for trouble and tragedy.

7 As the coach thundered round a curve on a narrow ledge of mountain road, the lead horses were dropped in their tracks by a sudden volley of gunfire from the rocks above, and the careening stage ground to a stop. The battle was short and furious, with the odds against the surprised treasure guards from the start. Within minutes the driver and the messenger were dropped from their seat atop the stage. The two inside guards held off the bandits a little longer, but they, too, were expertly picked off.

8 While two of the bandits dragged the heavy treasure chest from the stage, the third pulled the kingpin from the doubletrees and released the surviving horses. The bandits then set about trying to open the strongbox, but neither gunfire nor blows from the kingpin would crack the heavy lock. Finally, concluding that stronger measures would be needed to open the chest, the bandits dragged it to a small ravine a half mile or so from the road. Here they hurriedly buried the chest, making a rough map of the countryside and its identifying landmarks.

9 A few days later, while they were attempting to "round up" some horses belonging to someone else, the highwaymen became involved in a gun battle in which two of them were killed and the third seriously wounded. The wounded bandit confessed the stage robbery and was sent to jail, where he stubbornly refused to reveal the hiding place of the treasure chest until he realized that he was dying. In his last breaths he gasped out to a visiting friend the location of the chest—a small ravine at the center of a triangle formed by three ash trees. The exact spot was marked by a kingpin driven into the ground directly above the treasure.

10 Before the friend could recover the treasure, he got into trouble with the law and served a three-year jail term, shortly after which he was killed in a gunfight. This did not take place, however, until he, too, had recounted the story of the treasure to a friend. Eventually the story of the buried chest became more or less common knowledge—half truth, half legend. Many searches were made for the telltale kingpin. And then you became interested in the story.

11 You gathered all the facts you could lay your hands on, talking to a lot of old-timers and delving into books and records. You determined beyond a doubt that there had actually been a stage holdup, and that the stage had been carrying treasure. You located an old stagecoach exactly like the one used by the stage line to acquaint yourself with the appearance of the lost kingpin. You knew the dimensions of the chest—its exact width, height, and depth. Dog-eared records revealed that the treasure chest had contained $240,000.

12 You located the old stage route and retraced it slowly and laboriously, mile after mile, searching out the spot most likely to have been the scene of the robbery. And finally, after countless disappointments, you found a small ravine about a half mile from the site of the holdup; this you believed to be the location of the buried treasure. After all these years only one ash tree remained standing; but you discovered the stumps of two more that completed a perfect triangle.

13 You measured and remeasured until you found the exact center of the triangle—there was, however, no evidence of the kingpin. You scraped at the earth, but it appeared as solid and undisturbed as the day it was created. You doubtfully recounted your steps, but they brought you to the same conclusion—this was the spot where the treasure was buried.

14 The kingpin could have disappeared long since, perhaps picked up by a curious, unsuspecting horseman; perhaps covered by a cloudburst or an earthquake, or simply by the years' accumulation of debris. Any number of things could have happened to that kingpin.

15 You had carefully marked the spot until you could return with digging tools, and then tonight you had stealthily returned to the treasure

site, taking care not to be followed, and you had started digging . . . .

16 . . . Your spade bites into the earth. Suddenly it strikes something metallic. You pry it loose—there before your eyes is a foot-long iron rod with a U-shaped end. It is crusted with rust and corroded with age, but you recognize it at once—it is a kingpin from a stagecoach.

17 Now your hands tremble with excitement at every spadeful of dirt. You imagine that you see faint rust marks—and then you hit it. You know by the sound of the spade on solid metal that you have found the loot of the bullion-express holdup. You have found buried treasure!

HOW WELL DID YOU READ?

How did the writer tell this story?

1. **The description of the digging is written as though**
   - **A** it were a treasure hunter's diary
   - **B** the reader could be the hero
   - **C** two observers were discussing it

2. **The story begins in the present and ends in the**
   - **A** present
   - **B** past
   - **C** future

Can you see why?

3. **The treasure hunter dug under cover of night because**
   - **A** treasure hunting is illegal
   - **B** he was unable to come at any other time
   - **C** he did not want to share the treasure

4. **The stage holdup succeeded because**
   - **A** the robbers were able to take the guards by surprise
   - **B** the guards were not equipped
   - **C** the robbers outnumbered the guards

5. **The bullion was not immediately divided up because**
   - **A** the robbers disagreed about the split
   - **B** a posse caught the robbers in the act
   - **C** the gang was unable to open the chest

6. **The third robber revealed the chest's hiding place because he**
   - **A** hoped that his friend would recover it for him
   - **B** did not want the secret lost
   - **C** thought that would lessen his crime

How exact was your reading?

7. **The treasure hunter heard the story of the robbery from**
   - **A** the last surviving bandit
   - **B** a friend of one of the bandits
   - **C** some unidentified source

8. **The treasure hunter's first step was to**
   - **A** locate an old stagecoach
   - **B** make sure a treasure existed
   - **C** trace the old stage route

9. **The exact spot where the treasure hunter began to dig was determined by**
   - **A** the ash tree and stumps
   - **B** a treasure map
   - **C** the kingpin

Did you get the point?

10. **The treasure hunter succeeded where others failed because he had worked**
    - **A** secretly
    - **B** quickly
    - **C** thoroughly

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. acts that prevent danger *(3)*
2. uncoined gold or silver *(5)*
3. never ending; always present *(5)*
4. assembled display *(6)*
5. lurching *(7)*
6. bars to which horses are attached *(8)*

7. procedures *(8)*
8. loose pieces of rock; rubbish *(14)*
9. gradually eaten away by chemical action *(16)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. flight *(2)*
    A escape
    B act of flying
    C group of things flying together

11. calculated *(6)*
    A determined by arithmetic
    B planned; intended
    C estimated

12. dropped *(7)*
    A let fall
    B let go of
    C shot down

13. rough *(8)*
    A undetailed
    B violent
    C unevenly surfaced; not smooth

14. faint *(17)*
    A weak; feeble
    B timid
    C indistinct; unclear

C. *Mono* is a **root** from the Greek word *mono,* meaning "one." *Mono* is found in many English words, such as *monotone* (repetition of the same tone). *Poly* is a root from the Greek word *polys,* meaning "many." A *polyclinic* is a clinic where many diseases are treated. Other Greek roots that can be combined with *mono* and *poly* to make English words are

mania (madness; preoccupation)
morphos (shape)
gamy (marriage)
theos (god)
graph, gram (writing)

Directions: With these meanings in mind, write the word from column II that fits each definition in column I.

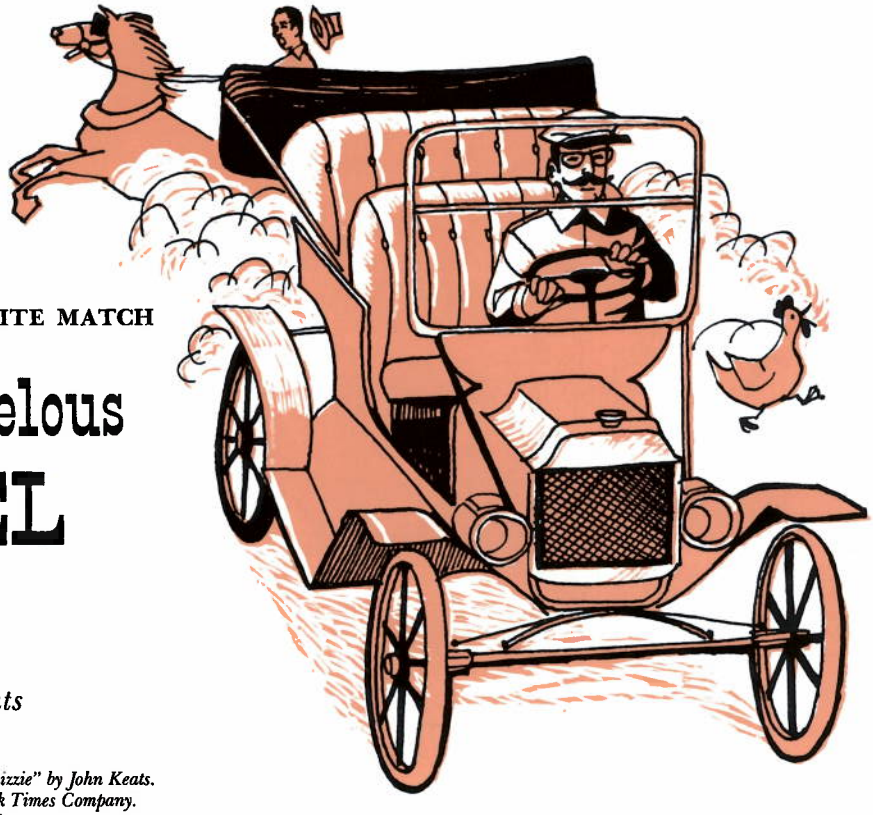
I	II
15. control of one over many things	polygraph
16. marriage to one person	monogram
17. worship of one god	monopoly
18. having many shapes	monotheism
19. a craze for one thing	polytheism
20. worship of many gods	monomania
21. design using one letter	monograph
22. book or article on one subject	monogamy
23. writing many things at once	polymorphic

D. Synonyms are words that have the same or nearly the same meaning. A *journey* may be called a *trip, jaunt, pilgrimage,* or *tour.* All these words are synonyms, but each has a different shade of meaning.

Directions: In column II there are five synonyms for *beautiful* and five synonyms for *clear.* Write the synonym that best fits each definition in column I.

I	II
beautiful	
24. good-looking; manly	magnificent
25. imposingly beautiful	lovely
26. pleasing, as of small, dainty things	handsome
27. inspiring love or admiration	graceful
28. having beauty of form and movement	pretty
clear	
29. bright; not overcast	distinct
30. visible; readily seen	apparent
31. capable of being seen through	plain
32. definite; well defined	transparent
33. simple; straightforward	cloudless

9



MODERN CARS CANNOT QUITE MATCH

The Marvelous MODEL "T"

by John Keats

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1 Old Henry Ford won the hearts of Americans with the wonderful Model T, the like of which was never seen before and has never been seen since. The Model T represented the climax of man's long effort to improve on the horse. It looked as if it had been designed by an unusually backward child in the lower grades, as one observer remarked; you had to wind it up to start it, and once you got it going, it jittered, shimmied, wheezed, clanked, rattled, and banged. But it ran. It ran practically forever.

2 The Tin Lizzie was light and only a hundred inches long. It could turn within a twelve-foot circle, and you could actually get in and out of it without crawling. It was high enough off the ground to clear tree stumps. It had so much power in relation to its weight that it could pull itself out of loose sand and sticky gumbo. It could go anywhere, and it went; it could do anything, and it did. You could make the engine run on a solution of kerosene and old candle ends. It was a better-built car, of better steel, than any other automobile of its time and a good many since, and nothing could go wrong with it that could not be fixed by anyone bright enough to count his fingers.

3 Most of the things that happened to it could be fixed with waxed twine, chewing gum, cold iron wire, or clothespins. The only tools you needed—even for major surgery—were a ball-peen hammer, a monkey wrench, a screwdriver, a paper clip, and a little patience. In the event of major surgery, you could buy new parts at the corner store, and they came cheap: a new fender cost $2.50, and a new muffler $1.25. You could order a Model T part by part and assemble it yourself, which many people did. If you wanted a new one delivered to your door, you could get it the same day—and for about one hundred dollars less than you will pay now for the cheapest eight-horsepower outboard motor on the market.

4 No car can be compared to the Model T for economy of initial purchase and subsequent operation. This is not to say that the Model T was dirt cheap at the time it appeared, considering the

relative worth of the dollar and the working man's wages in those days. Still, the 1908 touring model, at $850, was a comparatively cheap car, for other automobiles of 1908 were nearly three times as expensive and possessed fewer advantages.

5 Henry Ford made his profit on volume sales; he even raised his workers' wages while driving the price down. When the average car was selling for $2,317.56, Henry was able to hang a $500 price tag on his creation; later he drove the price down to $365. Even during the first year, at the highest price, eleven thousand Model Ts were sold.

6 Old Henry then locked up his design department and hid the key. He had wanted a no-nonsense, good, simple, practical, tough, economical means of transportation—one that could be used around the farm, one that was well suited to the American roads and the income of the time. When he came up with the Model T, that was that.

7 Now all he had to do was turn out a lot of them; in the process he became the only man in history to make the nation's farmers happy. In return they made him a billionaire, for during the next nineteen years 15,007,033 Tin Lizzies rattled off the assembly lines. There had been automobiles before the Model T appeared, but sheer volume production made *this* the car that freed the farmer from his isolated land, enabled the wage earner to live miles from his work, replaced the front porch with the Sunday drive, simplified the problem of the bank robber's getaway—in short, changed the whole pattern of life for the American common man.

8 Meanwhile, Henry asked himself: Why make anything else? Why change from the easily working planetary gears to the newfangled sliding gears that needed a clutch? It took a man almost a year to learn how to shift those sliding gears so that he could get into high without bounding down the road, looking like a frog with St. Vitus' dance and sounding like a canning factory with something wrong with it.

9 To hold the price down, the Model T was kept innocent of gadgets, and Henry said the customers could have any color they wanted so long as it was black—thus the name Lizzie, after the nickname of the queen of spades in the then widely popular game of hearts. The rattling, shimmying Model T, as omnipresent in America's hands as that black queen, was first called the Black Lizzie and then the Tin Lizzie.

10 New industries were born to supply fripperies that Old Henry refused to hang on his cheap little flivver: windshield rods, sun visors, dash lights, antishimmy rods, rattle silencers, and braces for the steering column.

11 In 1926, Chevrolet's sales passed the Model T's. The reason was that Chevrolets were flashier, more completely equipped. Any man wealthy enough to afford a Model T could afford a Chevrolet. Instantly, Henry shut his plant down. He recovered the key to the design department, went inside, and didn't come out until he had the Model A ready. The "A" was a grand car, but it wasn't a "T"—nothing ever was.

12 Yet, at the very point of the Tin Lizzie's official death, there was a resurrection. Practically every high school boy in the land got hold of one, secondhand. The sedate black Lizzie at once burst out in bright colors, decorated with legends. The Model T was a perfect schoolboy's car, for any kid could take it apart and put it together again. In

fact, the ease with which this could be done made one family late returning from a summer vacation. Loath to leave, the boy of the house simply disassembled the family flivver after his folks went to bed. When they rose early next day for the return trip, they found the car in pieces on the lawn.

13 As you read this, an indestructible Model T is shimmying over a rough road in some corner of the world, still being used as an everyday working car and not as a polished antique. There'll probably be one still going in the twenty-first century.

14 Economics and the current yen for high-speed travel in comfortable cars seem to conspire

against the reappearance of the Model T in modern dress, but perhaps manufacturers will produce something close to it. If so, then someone fifty years from now will remember it with affection. Maybe the truth is that the old Model T wasn't so wonderful after all. Maybe the truth is that it takes fifty years or more for the memory of a car to become truly beautiful—maybe. But in memory's eyes, the ugly old Black Lizzie is certainly a beauty, and, if memory serves, she suited this country to a T.

HOW WELL DID YOU READ?

How exact was your reading?

1. **Model T's made during the first year were higher in cost than**
   - **A** all later Model T's
   - **B** all other makes of cars of that era
   - **C** the Model A

2. **The Model T's nickname, Lizzie, came from its**
   - **A** small size
   - **B** black color
   - **C** light weight

Did you grasp the important facts?

3. **Ford was able to raise wages and lower costs by**
   - **A** selling larger quantities
   - **B** cutting down the number of employees
   - **C** selecting lower-cost construction materials

4. **The Tin Lizzie changed the pattern of American life primarily because of its**
   - **A** maneuverability
   - **B** durability
   - **C** price

5. **After he produced the Model T, Henry Ford planned to**
   - **A** continue improving it in all ways
   - **B** manufacture the same car indefinitely
   - **C** make only basic changes in design

6. **Ford produced the Model A because**
   - **A** popular tastes were changing
   - **B** he thought that the 1926 Chevrolet was better than the "T"
   - **C** he wanted a better equipped car

7. **The appearance of the Model A caused the Tin Lizzie to**
   - **A** disappear from the American scene
   - **B** enjoy a complete revival of popularity
   - **C** lose popularity except in certain circles

Did you understand what you read?

8. **In paragraph 3 the author refers to repairs to the Model T as "surgery" to suggest that**
   - **A** repairs were difficult to make
   - **B** the Model T seemed almost alive
   - **C** the repairs were vital

9. **By "suited this country to a T" the author means that the Lizzie**
   - **A** lived up to her name
   - **B** filled the needs of her time
   - **C** set trends in automobiles

What was the author's purpose?

10. **The main purpose of this article is to**
    - **A** encourage modern manufacturers to make a better car
    - **B** report fond memories of the Model T
    - **C** acknowledge the foresight of Henry Ford

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. first *(4)*
2. in all places at once *(9)*
3. a small, cheap automobile *(10)*
4. return to life; revival *(12)*
5. dignified; serious *(12)*
6. reluctant *(12)*
7. unable to be demolished *(13)*
8. widespread; prevalent *(14)*
9. act together for a purpose *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. backward *(1)*
- **A** slow; retarded
- **B** bashful; shy
- **C** reversed; contrary

11. practically *(1)*
- **A** nearly
- **B** usefully; workably
- **C** matter-of-factly

12. clear *(2)*
- **A** pass without contact
- **B** remove; get rid of
- **C** make free

13. solution *(2)*
- **A** answer to a problem
- **B** separation
- **C** mixture

14. volume *(5)*
- **A** book
- **B** quantity
- **C** loudness

C. *bi* (two)
tri (three)
tetra (four)
penta (five)
hexa (six)

The **prefixes** above are found in many English words, such as *bisect* (cut in two), *tricolor* (of three colors), and *tetragon* (four-sided figure).

Directions: The words in column II have the prefix *bi-*, *tri-*, *tetra-*, *penta-*, or *hexa-*. Write the word that fits each definition in column I.

I	II
15. coming twice a year	tetrachord
16. a group of four musical notes	trisect
17. figure with three angles	bicycle
18. rule by four persons	tetrarchy
19. figure with five sides	triangle
20. cut into three parts	hexagon
21. figure with six sides	pentagon
22. having five angles	biannual
23. two-wheeled vehicle	hexarchy
24. rule by six persons	pentangular

D. Antonyms are words that have opposite or nearly opposite meanings.

Directions: Look at each pair of words. If they are antonyms, write **A**; if they are not antonyms, write **N**.

25. disintegrate – assemble
26. contemporaries – co-workers
27. intellectual – scholastic
28. legible – unreadable
29. queried – questioned
30. prominent – pre-eminent
31. acute – mild
32. dominance – submission
33. gifted – untalented

RELICS OF AN ANCIENT RACE

THE GIANTS OF EASTER ISLAND

by Thor Heyerdahl

From Aku-Aku, *by Thor Heyerdahl. Copyright 1958 by Thor Heyerdahl. Published in the U.S. by Rand McNally & Company and in Great Britain by George Allen & Unwin Limited.*

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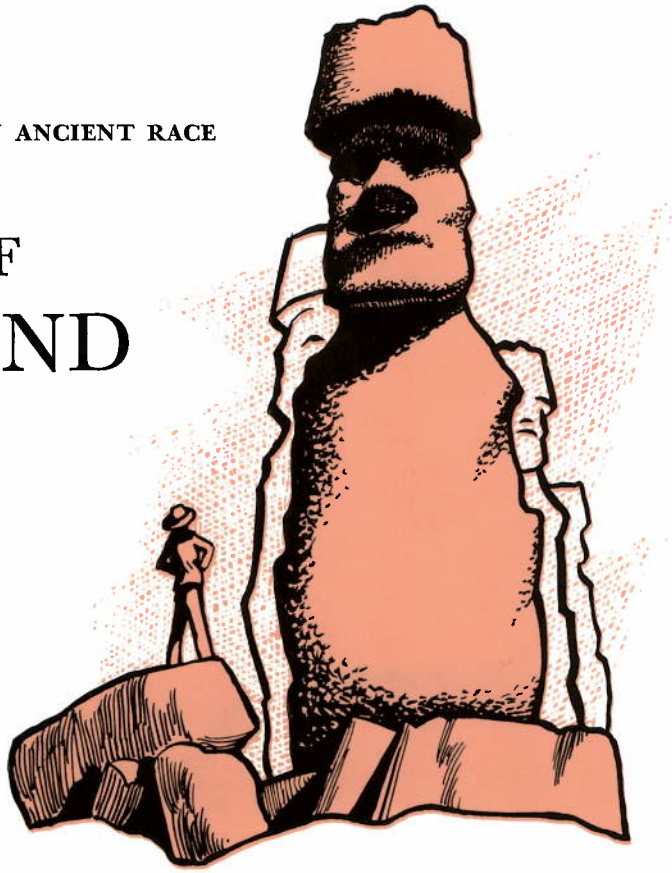


1 Anyone who is dreaming of a journey to the moon can get a little foretaste of it, as I did, by climbing about on the dead volcanic cones of Easter Island. The atmosphere of the island makes your own world seem immeasurably distant.

2 Some of the volcanoes have lain here peacefully for so long that sky-blue lakes have formed in their craters. One of the largest of the peaks is called Rano Raraku. Here men in the moon seem to have been busily at work. You have the feeling that they fled in haste from what they were doing. Whole sides of Rano Raraku have been greedily cut up as if they were pastry, although the rock is so hard that sparks fly when steel is driven against it. Hundreds of thousands of cubic feet of rock have been removed and tens of thousands of tons of stone carried away. And in the midst of the mountain's gaping wound lie more than a hundred and fifty gigantic stone men carved from the rock, in all stages of completion. At the foot of the mountain stand finished stone men side by side like a supernatural army.

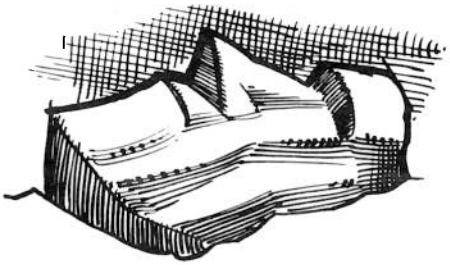
3 You feel miserably insignificant approaching the vanished sculptors' workshop, whether on horseback or driving in a jeep along the island's ancient roads. Dismounting from your horse in the shadow of a great block of stone, you see that the block has features on its underside: it is the head of a fallen giant. On approaching the closest figures, which are buried in the earth up to their chests, we were shocked to find that you cannot even reach up to the chins of the colossi. Thirty feet is no uncommon height for these figures; the largest, which lies unfinished and aslant on the side of the volcano, is sixty-nine feet long—as tall as a seven-story building.

4 We clambered on noses and chins and trod on mouths and gigantic brows. We had them above us, beneath us, and on both sides. The whole mountain was one single swarm of bodies and heads, from the foot to the very top of the precipice on the uppermost edge of the volcano. Even up there, five hundred feet above the plain, half-finished bodies lay side by side staring up into the firmament. But the swarm of stone men did not stop even up on the topmost ridge: they went on side by side and above one another in unbroken procession down the inside of the volcano, right down to the lush green reedbed on the edge of the crater lake, like an army of blind robots searching for the water of life.

5 We were surrounded, as in a hall of mirrors,

by countless enormous faces astonishingly alike. All had the same tight-lipped stoical expression and the most peculiar long ears.

6 It was difficult enough for a man on a rope without encumbrances to climb the skull of one of these standing giants; how it had been possible to carry up the large red "topknot," which was originally placed right on top of the head, we could not understand. Especially considering that the topknot, too, was of stone and could



have a volume of two hundred cubic feet and weigh as much as two elephants!

7 The engineers were as puzzled as the rest of us at how the weight of two elephants could have been lifted to the level of the roof of a four-story house when there were no cranes and not even a high spot in the vicinity. There was little use in guessing, so we explored the area for some clue.

8 To tackle the problem at its root, we first studied the numerous uncompleted figures that lay on the ledges in the quarry itself. It was clear that all work had been broken off suddenly. Thousands of primitive stone picks still lay in the open-air workshop; and as groups of sculptors had worked simultaneously on many different statues, all stages of carving were represented.

9 The facade of the figure was polished with a sort of pumice after it was complete in every minute detail—however, the workmen had taken care not to finish sculpting the eye. The eye was left blank; for the present, the giant was to be blind.

10 Then the back of the statue was cut loose from the rock, and transportation down the cliff to the foot of the volcano was begun. In some cases colossi weighing many tons had been swung down a vertical wall and maneuvered over lower ledges around statues still being worked on. Many were broken in transit, but most came down complete—that is to say, complete without legs, for every one of these statues ended in a flat cut-off foundation just where the abdomen ends and the legs begin; they could be described as lengthened busts with complete torsos.

11 At the foot of the cliff lay a thick layer of splintered stones that had been laboriously carried there from the quarry. Here the giant statues were temporarily raised to a standing position, supported in the rubble, so that their backs could be completed.

12 Only then were they ready for their trip across the island to their permanent locations. The trip was as long as ten miles in some cases, and the very smallest statues weighed from two to ten tons apiece. There were more than six hundred statues in all, all hewn from the same grayish-yellow, black-grained stone found only at Rano Raraku.

13 When they reached their destination, the statues were carefully mounted on an *ahu,* or temple platform. Not until then were their eyes chiseled in. Topknots were added to the statues as the finishing touch. The topknots, or *pukaos,* weighed tons. They were actually intended to represent the usual coiffure worn by male natives on Easter Island at the time of its discovery.

14 The rock used for the statues' pukaos was red in color, of a hue that apparently was prized very highly by the natives because it, too, occurred in only one place on the island—at a lava outcropping seven miles from Rano Raraku. This was the reason the topknots had to be added separately rather than carved in a single piece with the rest of the statue.

15 I measured the largest topknot I found at Pana Pau, the topknot volcano. It was six hundred and fifty cubic feet in size and weighed roughly thirty tons, or as much as sixty full-grown horses.

16 When I returned to camp I asked Mariana, an old village woman, if she knew how the great statues had been transported, and she began to tell about a witch who lived at Rano Raraku when the sculptors made the great figures. Her magic breathed life into the stone giants and made them go where they should. One day the sculptors ate a big lobster. When the witch returned, saw the empty shell, and realized that none of the contents had been given

to her, she was so angry that she made all the walking statues fall on their faces, and they have not moved since.

17 This story was believed by the Easter Islanders until we made experiments with carving, transporting, and erecting the statues and, with the islanders' aid, found that these things could be done by ordinary men.

HOW WELL DID YOU READ?

What details were given?

1. **The Easter Island sculptors used tools of**
   - **A** steel
   - **B** some unknown metal
   - **C** stone

2. **One of the most exaggerated features of the statues is their**
   - **A** eyes
   - **B** ears
   - **C** facial expression

3. **The topknots were meant to**
   - **A** protect the statues from rain
   - **B** serve as hats
   - **C** look like the natives' hairdos

4. **The statues were transported from place to place**
   - **A** by cranes
   - **B** by some unknown method
   - **C** on the backs of islanders

What was the writer's purpose?

5. **In this selection the writer is trying to**
   - **A** teach the reader a lesson
   - **B** acquaint the reader with the appearance of something
   - **C** tell a story about people he has known

6. **The author compares Easter Island to the moon in order to**
   - **A** give some idea of the island's appearance
   - **B** convey a feeling of complete strangeness
   - **C** prove some point about the moon's landscape

Can you draw the right inferences?

7. **The author feels "miserably insignificant" because**
   - **A** he is so impressed with the art and skill of the sculptors
   - **B** he is reminded so strongly of the moon
   - **C** the statues are so gigantic

8. **The author learned about Easter Island**
   - **A** as a member of a scientific expedition
   - **B** from books and magazine articles
   - **C** as a tourist visiting there

Evaluate the evidence

9. **Regarding the statues, the present-day inhabitants of Easter Island know**
   - **A** nothing about the origins
   - **B** the exact origins
   - **C** that men could have made and erected them

10. **It appears that the sculptors of the statues**
    - **A** disappeared without leaving any trace of themselves
    - **B** broke off work suddenly and disappeared
    - **C** are still present somewhere on the island

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. preview *(1)*
2. huge statues *(3)*
3. sky *(4)*

4. indifferent to pleasure or pain *(5)*
5. hindrances; loads *(6)*
6. neighborhood *(7)*
7. front *(9)*
8. pieces of broken stone *(11)*
9. shade of color *(14)*

B. A word's meaning may depend on its use.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. stages *(2)*
    A raised platforms for actors
    B scene of action
    C steps or degrees of work

11. figures *(3)*
    A images of people
    B shapes
    C prominent persons

12. foot *(4)*
    A unit of measurement
    B base; bottom
    C lower part of leg

13. volume *(6)*
    A mass
    B book
    C intensity of sound

14. tackle *(8)*
    A attach to something
    B try to solve
    C throw to the ground

C. *Aster* and *astro* are **roots** from the Greek word *aster,* meaning "star." *Aster* and *astro* are found in many English words, such as *astrology* (fortunetelling by the stars) and *astronomical* (pertaining to the study of the stars).

Other Greek roots that can be combined with *aster* and *astro* to make English words are

metry (measurement)
nomos (law or system of laws)
naut (traveler)
oid (like; similar)
isk (small)
ics (art; practice; study)

Directions: With these meanings in mind, write the word from column II that matches each definition in column I.

I	II
15. science of space travel	aster
16. measurement of stars	asteroid
17. space traveler	astronaut
18. starlike flower	asterisk
19. like a star	astronomy
20. small star used in printing	astrometry
21. person who tells fortunes by studying the stars	astronautics
22. study of the natural laws governing stars and planets	astrologer

D. Synonyms are words that have the same or nearly the same meaning. A *bit* may be called a *morsel, crumb, particle,* or *piece.* All of these words are synonyms, but each has a different shade of meaning.

Directions: In column II there are six synonyms for *happy* and five synonyms for *sad.* Write the synonym that best fits each definition in column I.

I	II
happy	
23. contented; pleased; having one's needs and wishes fulfilled	cheerful
24. full of fun and laughter; mirthful	joyful
25. in a state of being overpowered by happiness	satisfied
26. delighted; gladdened	merry
27. in a steady state of optimism; in good spirits	elated
28. lifted up in spirit; excited; proud	ecstatic
sad	
29. sober; somber and serious	dejected
30. full of sorrow, pity, or sympathy	miserable
31. wretched; in unpleasant or uncomfortable circumstances	grave
32. downcast; discouraged; disheartened	melancholy
33. pensive; sadly musing	sorry

11

The Capture of GERONIMO

BEAR MEETS TRAPPER

by Earl S. Fleming

Based on "I Take Brown Bears Alive" by Earl S. Fleming, Outdoor Life.
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1 My head was pressed against the back door of the long iron trap, and my eyes were glued to the peephole. Before I could distinguish anything in the semidarkness inside, three things happened simultaneously. I heard a terrific explosion, saw a flash of light, and was stunned by a jarring blow on the head.

2 What had happened? As I reeled backward into the brush, three explanations sprang to my mind: lightning had struck the trap, the trap had exploded, or a bear cub was in the trap and its mother, waiting outside, had charged me. With a coughing grunt and a rattle of metal from inside the trap, the truth dawned—a captive bear had banged against the interior of the steel plate that my head had been pressed against.

3 Drinking some icy water from the winding river in front of the bear trap and splashing a quantity over my head brought me fully to my senses. I was too grateful for my safety to pay much attention to the splitting headache I still had. More cautious now, I pushed aside the inspection door with a stick. Almost instantly a long muzzle poked out, accompanied by a series of hoglike grunts and long, inquisitive sniffing noises. Without wasting a moment I set up the weighing apparatus. Then, so that I could anesthetize the captured bear, I started chinking the air holes in the trap.

4 As I was plugging the second hole the rag disappeared inside the trap. Another attempt ended the same way. It was obvious that I was dealing with an animal of superior intelligence. I tried a different opening, but to no avail; the captured brownie was unplugging the holes as quickly as I filled them. Despite my frustration, I was a happy trapper indeed, because now there

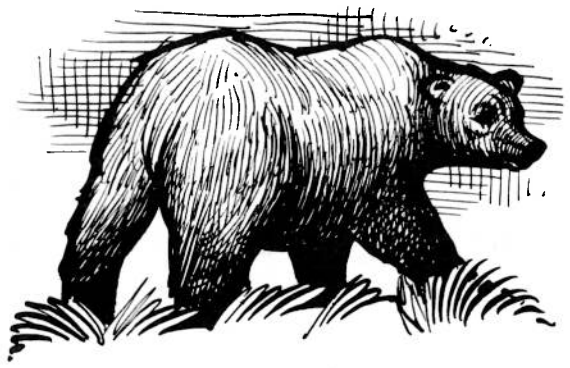
was no doubt about the identity of my prisoner.

5 Backing quietly away, I started working again at the other side of the trap. I was feeling quite clever at having outwitted Geronimo, as I had immediately nicknamed him, when a sledge-hammer wallop struck the inside of the trap right under my nose. Surprise and fright catapulted me eight feet into the brush. I was relieved that no fellow worker with the Alaskan Wildlife Service was watching this job.

6 Having decided that a bit of strategy was in order, I whittled some short willow sticks to tapering points and forced them into the holes. These served my purpose; the more the bear tried to pull them inside, the tighter they stuck. Geronimo tested each stick carefully, and I enjoyed watching the plugs move around, knowing that if everything passed his inspection, I had done a good job.

7 Filling the sprayer with ether, and putting the nozzle to the hole left open for that purpose, I started pumping anesthetic into the trap. At this point it wouldn't have surprised me much if the bear had put a paw over the inside of the hole to keep out the fumes. If he had, I think I'd have just opened the door and released him.

8 After I'd pumped for forty minutes—and used three and a half pints of ether—the bear finally gave in to unconsciousness. I had at the most five or six minutes to work in before he would start to revive. My first task was to elevate the heavy iron trap door and insert a spike under it so that I could drag Geronimo out for weighing. As I pushed the door up, the spike slipped to the ground and the bear's head rolled limply over the threshold. There was the super-intelligent brownie that had been eluding me for so long. I couldn't move the massive head, however, and the door was too heavy to let down on the animal's head without injuring him. My mind worked frantically, but there was only one solution: I had to remove the door completely by sliding it up out of the grooves.



9 I strained until I saw black spots dancing before my eyes; my vision blurred from the perspiration trickling down my forehead. Glancing down momentarily, I saw the bear's eyelids flickering, the first sign of revival. I realized that something had to be done fast. Most of the door was now above the top of the channels; pushing the top of the door back with all the strength I could muster, I hoped to lock the bottom in the grooves. Slowly I relaxed my hold on the handle—the door didn't slip.

10 I quickly grabbed the ether pail. The bear had his head up now and was calmly surveying the situation. Lying on his stomach, his left foreleg outstretched and his right foreleg under his body, he offered no objection as I pushed the bucket over his head. His attitude changed, though, with the first inhalation of ether; reaching up with his free paw, he hooked his powerful claws over the lower edge of the bucket and with a frantic shove sent me and the pail tumbling into the nearby brush. Prepared now for rougher tactics, I rushed in again, planted my right foot on his free paw, upturned the bucket over his head, and held on.

11 The bear threw his head back vigorously, but somehow I managed to hold on, though my teeth rattled as he jackknifed and twisted, struggling for freedom. An eternity later, I felt his neck muscles relax as the anesthetic took effect once more.

12 Geronimo measured 74 inches; I estimated his weight at 450 pounds; "he" turned out to be female. After taking such statistics for the Alaskan Wildlife Service, I mounted the camera on its tripod, set the timer, and took pictures of myself and Geronimo together. I wanted some proof of the adventure. Everything was going extremely well until I snapped the last photograph and had to change film. I worried because the bear was recovering, but several minutes passed before the camera was ready again. Then I hastily put it on the tripod, focused, set the timer, and turned to get into the picture.

Geronimo was watching me with keen interest and clear eyes.

13 It was evident that any attempt to put my arm around her neck might record a picture of the bear with my head in its mouth. Then the expression in the bear's eyes changed; trouble was ahead.

14 As the camera clicked, the bear gave a start and raised her head. With a gargling roar, she lunged toward me. With the bear snorting at my heels I raced around the trap and plunged through the river to an island in the middle of the stream. By then, however, Geronimo had given up the chase; bellowing and shaking her head, she was trampling two thousand dollars worth of my finest camera equipment. It was a horrible sight. Having vented her anger, she walked slowly towards the stream and, after drinking copious amounts of water, lumbered away into the underbrush.

15 I was left with a sore bump on my forehead, another on the back of my head, and a throbbing welt across the lower part of my right biceps where the pail had gouged me. I started back to camp; it seemed like a week since breakfast.

HOW WELL DID YOU READ?

Can you follow the time order?

1. **The writer knew that he had a bear as soon as**
   - **A** the prisoner banged against the steel plates
   - **B** he heard a grunt inside the trap
   - **C** he opened the trap door

2. **In the usual procedure of capturing and taking statistics on a bear, the first step was to**
   - **A** anesthetize it
   - **B** elevate the trap door
   - **C** set up the weighing apparatus

3. **The danger to the writer was greatest**
   - **A** at the beginning of the story
   - **B** when the bear awoke the first time
   - **C** after he snapped his last picture

4. **The moment the bear finally won its freedom, it**
   - **A** lumbered away into the woods
   - **B** attacked the writer
   - **C** dived into the river

What did the writer think?

5. **The bear's most outstanding trait was its**
   - **A** intelligence
   - **B** strength
   - **C** ferocity

Did you notice the interesting details?

6. **The writer was primarily interested in**
   - **A** hunting bears
   - **B** capturing bears for shipment to zoos
   - **C** weighing and measuring bears for the government

7. **The first sign that the bear was coming to was**
   - **A** its sitting up suddenly
   - **B** the flickering of its eyelids
   - **C** a loud growl

8. **The author was mistaken when he**
   - **A** removed the trap door completely
   - **B** used sticks to plug the holes
   - **C** gave the bear a masculine name

How does the writer tell his story?

9. **According to paragraph 7, the writer would have released the bear because he**
   - **A** was ready to give up on the animal
   - **B** was greatly impressed with its cunning
   - **C** could not afford to waste any more time on it

10. **This story is told as though the writer were**
    - **A** relating the past experiences of a friend
    - **B** telling about something that had once actually happened to him
    - **C** describing an experience that is happening now

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. curious *(3)*
2. mechanical device *(3)*
3. put to sleep *(3)*
4. stuffing *(4)*
5. hurled *(5)*
6. bottom of an entrance *(8)*
7. gather together *(9)*
8. breathing in *(10)*
9. plentiful *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. brush *(2)*
    - **A** bristled implement
    - **B** small battle; skirmish
    - **C** foliage; woods

11. dawned *(2)*
    - **A** became clear
    - **B** gave promise
    - **C** grew light

12. in order *(6)*
    - **A** appropriate; required
    - **B** tidy
    - **C** following correctly

13. point *(7)*
    - **A** sharp end
    - **B** time
    - **C** place

14. start *(14)*
    - **A** beginning
    - **B** sudden movement
    - **C** advantage

C. *tain* (hold)
fer (carry)
serve (serve)

These Latin **roots** are combined with many different word parts in English words.

Directions: Combine each word part on the left with *tain, fer,* and *serve* to make nine words that fit the definitions below. Write the words.

de con re	tain	fer	serve

15. have inside; enclose; include
16. put off to a future time; postpone
17. keep from being damaged, lost, or wasted
18. hold or keep in possession; hire; keep in a fixed condition
19. keep in custody; confine; delay
20. keep back; set apart for later use
21. meet for discussion; converse
22. be worthy of; merit
23. be related; direct a person to someone

D. Synonyms are words that have the same or nearly the same meaning.

Directions: For each word in column I, find a synonym in column II and write it.

I	II
24. stunned	question
25. pressed	remaining
26. attempt	only
27. doubt	raise
28. forced	summon
29. left	compelled
30. just	expended
31. used	dazed
32. elevate	pushed
33. muster	try

If you enjoyed reading the Tan Power Builders,
you might also enjoy the following Literature Selections:

16. *The Blue Lenses*
17. *Bartleby the Scrivener*
18. *O Russet Witch*

1

Recipe for Murder

by C. P. Donnel, Jr.

1 Just as the villa, clamorous with flowers, was not what he had anticipated, so was its owner a new quantity in his calculations. Madame Chalon, at forty, fitted no category of murderess; she was neither Cleopatra nor beldame. A Minerva of a woman, he told himself instantly, whose large liquid eyes were but a shade lighter than the cobalt blue of the Mediterranean twinkling outside the tall windows of the salon where they sat.

2 "Coffee, Inspector Miron?" she inquired, preparing to pour. His reflex of hesitation lit a dim glow of amusement in her eyes, which her manners prevented from straying to her lips.

3 "Thank you," he responded, annoyed with himself.

4 Madame Chalon made a small, barely perceptible point of drinking first, as though to say, *See, Monsieur Miron, you are quite safe.*

5 "You have called about my poisoning of my husbands," she stated flatly and with a tiny smile.

6 "Madame!" Again he hesitated, nonplussed.

7 "You must already have visited the Prefecture. All Villefranche believes it," she said placidly.

8 He adjusted his composure to an official calm and replied, "Madame, I come to request your permission to disinter the body of M. Charles Wesser, deceased January 1939, and M. Etienne Chalon, deceased May 1946, for official analysis of certain organs. You have already refused Sergeant Luchaire of the local station this permission. I would like to know, why?"

9 "Luchaire is a type without politeness, without finesse—unlike you. I refused the attitude of the man, not the law." As she raised the demitasse to her full lips, she went on, "I shall not refuse you, Inspector Miron." Her eyes were almost admiring.

10 "You are most flattering."

11 "Because," she continued gently, "I am quite sure, knowing the methods of you Paris police, that the disinterment has already been conducted secretly." She waited for his color to deepen, affecting not to notice the change. "And the analyses," she continued, as though there had been no break, "completed. You are puzzled. You found nothing, so now you, new to the case, wish to estimate me, my character, my capacity for self-control—and incidentally your own chances for maneuvering me into conversation that will guide you in the direction of my guilt."

12 So accurately did these darts strike home that

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it would be the ultimate stupidity to deny the wounds. Better a disarming frankness, Miron decided quickly. "Quite true, Madame Chalon. True to the letter, but"—he regarded her closely—"when one loses two husbands of some age—but not old—to a fairly violent gastric disturbance, each within two years of marriage, each of a substantial fortune and leaving all to the widow . . . You see . . . ?"

13 "Of course," Madame Chalon said, walking to the window and letting her soft profile be silhouetted against the blue water. "Do you desire a full confession, Inspector Miron?" She was very much a provocative woman, and her tone, just short of flirtation, warned Miron to keep a grip on himself.

14 "If you would care to offer one, Madame Chalon," he said, as casually as he could. A dangerous woman.

15 "Then I shall oblige," Madame Chalon responded without a smile. Through the open window a vagrant whiff of air brought him the scent of her, or was it the fragrance of the garden? Caution kept his hand from his notebook. Impossible that she would really talk so easily, and yet . . .

16 "You know something of the art of food, M. Miron?"

17 "I am from Paris, you remember."

18 "And love, too?"

19 "As I said, I am from Paris."

20 "Then"—the bosom swelled with her long breath—"I can tell you that I, Hortense Eugenie Villerois Wesser Chalon, did slowly and deliberately, with full purpose, kill and murder my first husband, M. Wesser, aged fifty-seven, and likewise my second, M. Chalon, aged sixty-five."

21 "For some reason, no doubt." Was this a dream—or insanity?

22 "M. Wesser I married through persuasion of family. He was, I discovered within a fortnight, a boor—a swine of insatiable appetites—a crude man, Inspector; a braggart, cheater of the poor, deceiver of the innocent, a gobbler of food, an untidy man of unappetizing habits—in short, with all the revolting faults of advancing age and none of its tenderness or dignity. Also, because of these things, his stomach was no longer strong."

23 Having gone thoroughly into the matter of M. Wesser in Paris and obtained much the same picture, Inspector Miron nodded and asked, "And M. Chalon?"

24 "Older—as I was older when I wed him."

25 With mild irony, "And also with a weak stomach?"

26 "No doubt—say, rather, a weak will. Perhaps less brutish than Wesser, perhaps, worse, for he knew too many among the Germans here. Why did they take pains to see that we had the very best, the most unobtainable of foods and wines, when, daily, children fainted in the street?* Murderess I may be, Inspector, but also a Frenchwoman, so I decided without remorse that Chalon should die, as Wesser died."

27 Very quietly, so as not to disturb the thread, "How, Madame Chalon?"

28 She turned, her face illumined by a smile, and responded, "You are familiar, perhaps, with such dishes as *Dindonneau Forci aux Marrons,* or *Suprêmes de Volaille à l'Indienne,* or *Tournedos Mascotte,* or *Omelette en Surprise à la Napolitaine,* or *Aubergines à la Turcque,* or . . .?"

29 "Stop, Madame Chalon! I am simultaneously ravenous and smothering in food, such richness of food!"

30 "You asked my method, Inspector Miron. I prepared these dishes and a hundred others, and in each of these dishes I concealed a bit of—"

31 Inspector Miron, by a mighty effort, steadied his hand as he finished his coffee and said, "You concealed a bit of what, Madame Chalon?"

32 "You have investigated me, so you know who was my father."

33 "Jean-Marie Villerois, chef superb, matchless disciple of the matchless Escoffier, and once called Escoffier's sole worthy successor."

34 "Yes, and before I was twenty-two, my father, just before his death, admitted that outside of a certain negligible weakness in the matter of braising he would not be ashamed to own me as his equal."

35 "Most interesting. I bow to you," Miron responded, his nerves tightening at this handsome woman's faculty for irrelevancy. "But you said you concealed in each of these dishes a bit of . . .?"

36 Madame Chalon turned her back to him. Fine shoulders, he noted, and a waist not to be ignored. She addressed the sea: "A bit of my art, and no more—that and no more, Inspector. Three, four times a day, I provided them food of the richest

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*Madame Chalon suggests that M. Chalon was a Nazi sympathizer during World War II.

sort—varied, irresistible. I tempted them to gorge to bursting, sleep, gorge again, and to drink an abundance of wine that they might gorge still more. How could they, at their ages, endure—even as long as they did?"

37 There was a silence like the ticking of a far-off clock, and Miron continued, "And love, Madame Chalon? Forgive me, but it was you who mentioned the subject."

38 "Rich food breeds love—or the semblance of it—and so they expired—M. Wesser, aged fifty-seven, M. Chalon, aged sixty-five. That is all."

39 Inspector Miron stood up so abruptly that Madame Chalon started, whirled. She was paler.

40 "You will accompany me to Nice this evening, Madame Chalon."

41 "To the police station, Inspector Miron?"

42 "To La Camargue, Madame Chalon, for champagne and music. We shall converse some more."

43 "But Inspector Miron . . .!"

44 "Listen to me, Madame. I am a bachelor of forty-four—not too terrible to look at, I have been told. I have some savings put away, and, while I am not a great catch, I am not one to be despised." He looked into her eyes and spoke firmly, "I wish to die."

45 He straightened his shoulders, set his figure at its best as Madame Chalon's eloquent eyes appraised him.

46 "The diets," said Madame Chalon finally and thoughtfully, "if used in moderation, are not necessarily fatal. Would you care to kiss my hand, Inspector Miron?"

HOW WELL DID YOU READ?

Do you remember the facts?

1. **The story takes place in**
   - **A** Paris
   - **B** Villefranche
   - **C** Nice

2. **Inspector Miron took over the case of Madame Chalon because**
   - **A** she refused to cooperate with local police
   - **B** he was the French expert on murder cases
   - **C** he was knowledgeable about food and wine

Did you understand the author's techniques?

3. **The author's purpose in this story was to**
   - **A** inform
   - **B** persuade
   - **C** entertain

4. **Into which category does this story best fit?**
   - **A** Mystery
   - **B** Humor
   - **C** Biography

5. **The conclusion of the story is an example of which of these literary techniques?**
   - **A** Personification
   - **B** Metaphor
   - **C** Irony

Can you make the right inferences?

6. **Madame Chalon agreed to the disinte of her two husbands because she**
   - **A** thought the bodies had already been disinterred
   - **B** knew Inspector Miron would never take no for an answer
   - **C** wanted to make a good impression on Inspector Miron

7. **Madame Chalon confessed to Inspector Miron probably because she**
   - **A** thought Miron was smart enough to entrap her anyway
   - **B** knew there was no concrete evidence on which to base an arrest
   - **C** assumed Miron would never believe such a fantastic story

8. **Which of these phrases best describes Madame Chalon?**
   - **A** Thoughtless and cruel
   - **B** Strong and self-confident
   - **C** Aggressive but careless

9. **Throughout the story, Inspector Miron looked upon Madame Chalon with**
   - **A** admiration
   - **B** amusement
   - **C** fear

10. By the end of the story, Madame Chalon's attitude toward Inspector Miron had seemingly changed from

A amusement to dislike
B fear to respect
C suspicion to affection

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. puzzled *(6)*
2. calmly *(7)*
3. self-control *(8)*
4. delicate skill *(9)*
5. fleeting *(15)*
6. not to be satisfied *(22)*
7. brightened *(28)*
8. unimportant *(34)*
9. likeness *(38)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. shade *(1)*

A bit; minute degree
B shelter from the sun
C flexible screen on a roller

11. salon *(1)*

A gathering of notable persons
B elegant living room
C stylish shop

12. darts *(12)*

A small, spearlike missiles
B sharp remarks
C quick movements

13. thread *(27)*

A slender stream
B very thin cord
C train of thought

14. dishes *(28)*

A serving containers
B microwave antennae
C particular foods

C. The **suffix** *-age* means "amount of" or "state of."

Directions: Decide the meaning of *-age* in each word below. Write *amount of* or *state of.*

15. vassalage	**20.** tonnage
16. mileage	**21.** suffrage
17. postage	**22.** acreage
18. dotage	**23.** marriage
19. patronage	**24.** verbiage

D. Figures of speech are used to make language richer and more vivid. **Metaphors** and **similes** are figures of speech that make comparisons. A simile likens one thing to another thing by stating that the one is *like,* or the same as, the other thing: "The ice was as slippery as glass." A metaphor likens one thing to another by describing it as if it *were* that other thing, without the use of *like* or *as:* "The world is a stage."

Directions: Each quotation below contains either a metaphor or a simile. Read each quotation. If it contains a metaphor, write **M**; if it contains a simile, write **S.**

25. "Every hour passed quickly, like a sail on the sea."

26. "If poetry comes not as naturally as leaves to a tree, it had better not come at all."—

27. "Spring, the sweet Spring, is the year's pleasant king."

28. "Our ships were British oak, and hearts of oak our men."

29. "Their learning is like bread in a besieged town; every man gets a little, but no man gets a full meal."

30. "His talk was like a stream, which runs with rapid change from rocks to roses."

31. "The Lord is my shepherd; I shall not want."

32. "My heart is like a singing bird
Whose nest is in a watered shoot."

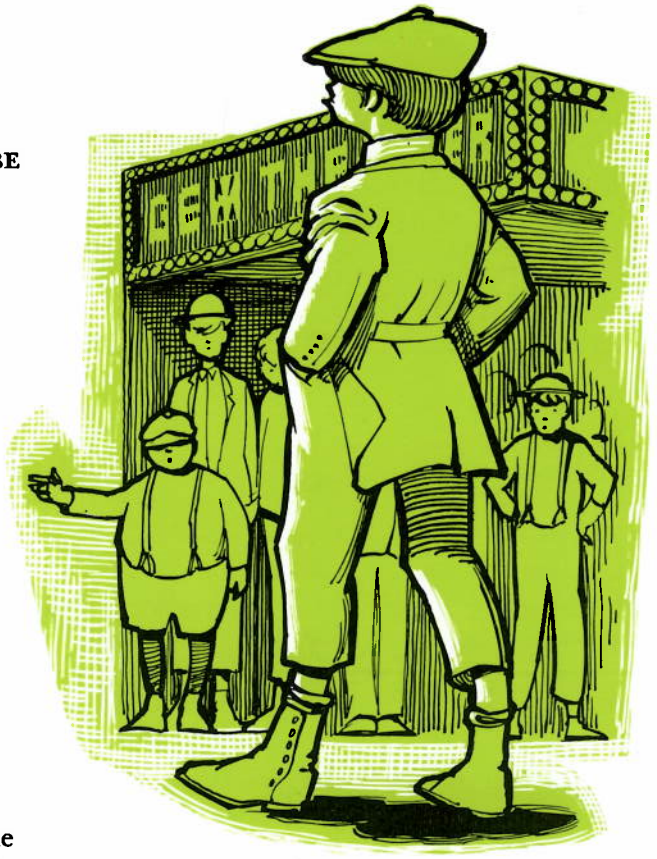
33. "Architecture in general is frozen music."

2

IN MORE WAYS THAN ONE
MOVIES AREN'T WHAT THEY USED TO BE

Two for a Nickel

by Harry Golden
(1902–1981)



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1 The movies the immigrants saw on the lower East Side of New York did not come from the never-never land a continent away, where rain never falls. This is not to pretend that we didn't take them seriously—we did. But we knew that motion pictures were made nearby. The Vitagraph Studios were out in Brooklyn on Avenue M; there was another movie studio over in New Jersey, and still another one along about Twenty-Third Street.

2 Motion pictures were, you might say, a backyard product. Also the scandals of movie stars, what scandals there were, were commensurate with the scandals along Eldridge and Rivington (we called it Riv-INK-ton) streets and were never graphically reported. Nor were we subjected to an endless parade of look-alike blonde starlets. Movies in those days were not a private society; they were just entertainment.

3 At first they were called "flickers"; later this was changed to "movies"; and when the industry became really respectable, they tried to change its name to something French, the "cinema"; but this simply refused to take hold. Movies were never called then, as they are now, an "escape mechanism." It is true that they let the imagination escape from the lower East Side, but the imagination did not escape into nothing; it escaped into America.

4 East Side immigrant boys didn't troop to see Broncho Billy Anderson because they wanted to grow up and become actors or because they couldn't stand their homelife. We went to see Broncho Billy movies because he personified the attitudes we admired in this new world. He was a heroic cowboy; that's what we wanted to be, heroic cowboys. The early westerns conferred upon us the first ideals of American manhood: speak truth, shoot straight, and save the wagon train.

5 The movies were a glamorous adventure, for flickers had recently moved from untenanted shoe stores and converted vegetable markets into genuine theaters with veneered seats which swung down and up on metal hinges. (I've come a long way, because I understand that now they are reconverting movie theaters back into vegetable markets.)

6 There were two theaters I went to regularly. One, on East Houston (pronounced Howston) Street, was called the Gem and the other, on Norfolk Street, the Odeon. Going to the movies was a community endeavor. You went to the theater clutching your two pennies (admission was two for a nickel), hoping to find a fortunate fellow with three pennies who would double up with you. In front of the theater you invariably met the better part of a football team, all of them with two pennies and all of them crying the same singsong chant: "Who's got three? Who's got three?" The chant was very rarely interrupted.

7 You could always spot a "rich kid" with three pennies a block away. He would saunter along, taking his time, looking us all over with the cold scrutiny a baseball manager reserves for his pitching staff on opening day before the game begins. I was rarely selected, because if the theater was crowded, the ushers often made us double up, so the rich kid with three pennies always picked the skinniest partner under the marquee.

8 Inside was the silver screen and the legend "Ladies, kindly remove your hats." A buzz always hummed throughout the theater; everyone always read the screen titles aloud to his neighbor. During the movie, and especially in summer, a fellow traveled up and down the aisles spraying perfumed antiseptic above the heads of the audience. The aisles were also populated with white-capped candy butchers selling oranges, peanuts, Cracker Jack, and other miscellanea (never popcorn as I remember).

9 As you entered the theater, an usher presented you with a late check; this was a three-by-five card with the name of the picture and "late check" imprinted on it. After the movie was over, the usher collected all the late checks, and if you didn't have one, you couldn't stay for the beginning of the feature. This effectively prevented kids from seeing the movie three or four times, a natural urge in boys. (Years later I trekked to the Nemo Theater on Broadway and 110th Street one wintry night to reclaim my own sons, who had, their mother informed me, been there all day. These sons of mine—one who later became a paratrooper, another an artilleryman and hardened police reporter, and the third a Chaucerian scholar—had sat through a Shirley Temple picture *three* times, and when I found them they implored me to let them see it just once more.)

10 There was a similar raid on a movie theater when I was a boy—a *melamed* raid. Although not ordained, a melamed is a Hebrew teacher, and every Jewish boy on the lower East Side took Hebrew lessons. Either the melamed came to your house at a quarter a visit or you trudged reluctantly to his, four days weekly at the monthly rate of a dollar and a half. One day when we were supposed to be at the melamed's house we decided to play hooky instead and see the Seventh Cavalry wallop the Apaches again. As I remember, this melamed was rather an unpleasant fellow; he wore a heavy brass thimble on his index finger, and if you made a mistake reading the Hebrew lesson, he would thump your head smartly with the thimble.

11 This system led to a lot of right answers, but it wasn't the most enjoyable academic activity. (The melameds who didn't use the thimble system had developed a special *knip,* a corkscrew-pinch which certainly alerted you to the business at hand.)

12 The cavalry didn't rescue the wagon train in time, for suddenly the melamed burst into the theater, an usher and a manager trying to restrain him. We saw him first and tried to hide our faces behind our knees, but even though it was dark he proved very adept at hunting us out. About this time the manager and the usher understood we were playing hooky, and they cooperated and hustled all of us from our chairs. An epidemic of indiscriminate thumps fell that afternoon.

13 When someone said of 3-D movies, which once helped pull Hollywood out of the red, that they were the least likely messiah in the history of hope, I recalled an even more unlikely candidate. This was the first "sound" picture on the East Side in 1914. The movie arrived at a theater on Second Avenue in the middle of a large immigrant community where there were few who could speak or read English. To get these people inside the movie house, the manager hit upon an inspired idea: he hired two actors, equipped both with megaphones, and had them ad-lib their lines in Yiddish as the action unfolded. It was the first (and only) all-

talking, Yiddish-speaking picture in history. The experiment was not a notable success, since it helped keep away from the movie the patrons who did speak and read English. Nevertheless, you have to admire the pioneering invention of this manager.

14 Sound, of course, did come at last, and other improvements, too. I remember going to the opening of the opulent Roxy Theater built by Mr. S. L. Rothafel (Roxy), a now destroyed tribute to the gorgeous optimism of the twenties. What made it such a memorable experience was that it was the first time I had ever seen uniformed usherettes, a whole phalanx of them, all equipped with flashlights. Neither Technicolor nor Cinemascope has made such an impression on me. But most nourishing of all are the memories that remain of John Bunny, Pearl White, Mary Pickford, Ford Sterling, and—Broncho Billy.

HOW WELL DID YOU READ?

How careful was your reading?

1. The 1914 sound picture was

- **A** a failure because the real sound track was lost
- **B** really just another silent movie like all the rest
- **C** a success with non-Jewish patrons who could read the titles

2. The melamed's thimble and the *knip* were

- **A** a means of punishing disrespectful boys
- **B** effective teaching aids
- **C** a means of keeping boys away from movies

Did you get the important points?

3. One criticism the author seemed to have of modern movies was that

- **A** they offered not entertainment but escape from life
- **B** they didn't have as much appeal for children as the flickers had
- **C** Hollywood was too much like the rest of America

4. One of the main attractions of silent movies was that they

- **A** were seldom taken seriously
- **B** provided a place to make friends
- **C** showed what the ideal American man was like

Can you draw the right inference?

5. In his lifetime the author had seen movies

- **A** grow to be the chief form of entertainment from small beginnings
- **B** gain great popularity, then lose it
- **C** continue to grow more popular

6. One thing the melamed raid showed was that

- **A** the melamed was worried about the boys' not learning Hebrew
- **B** most boys hated their Hebrew lessons
- **C** adults would cooperate to make boys do as they were supposed to

Can you draw the right conclusions?

7. The use of terms like *flickers, movies,* and *cinema* showed that

- **A** people have always wanted to change the names of familiar things
- **B** moviemaking became more respectable later than it was at first
- **C** moviemaking first won most people's interest, then lost it

8. The author's attitude toward "speak truth, shoot straight, and save the wagon train" was probably that

- **A** it was all right for children but does not work out in adult life
- **B** times have changed and it is now out of date
- **C** there is still value in it

What is the author's purpose?

9. The author mentioned his own sons' experience in order to

- **A** show that children today love movies less
- **B** explain why the "late check" was used
- **C** prove that the desire to see more than one showing has not changed

10. **This selection can be best characterized as**
    A a series of scenes from a happy childhood
    B a colorful description of how movies began
    C humorous memories of a boy's view of silent movies

13. legend *(8)*
    A sign or inscription
    B story of a saint
    C tale, partly true and partly myth

14. smartly *(10)*
    A quickly
    B cleverly
    C so as to cause a stinging feeling

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. proportionate to *(2)*
2. mental process *(3)*
3. was a perfect example of *(4)*
4. covered with a thin layer of choice wood *(5)*
5. effort *(6)*
6. long careful look *(7)*
7. highly skillful *(12)*
8. random *(12)*
9. luxurious *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. lower *(1)*
    A inferior in value or rank
    B having less height
    C farther south

11. conferred *(4)*
    A held a conference
    B bestowed
    C consulted

12. community *(6)*
    A shared
    B owned in common
    C district; city

C. The **prefixes** *pre-* and *pro-* both mean "before" or "ahead." Usually only one of these prefixes can be used with a specific word.

Directions: Decide which prefix goes with each word part below. Add the prefix and write the word.

15. __fix
16. __vide
17. __judice
18. __gress
19. __fabricate
20. __paid
21. __claim
22. __pose

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says. "He lost his head" does not mean that he misplaced his head. It means that he lost his self-control and became excited or flustered.

Directions: The idioms in column II are built on the word *head*. Write the idiom that best fits each meaning in column I.

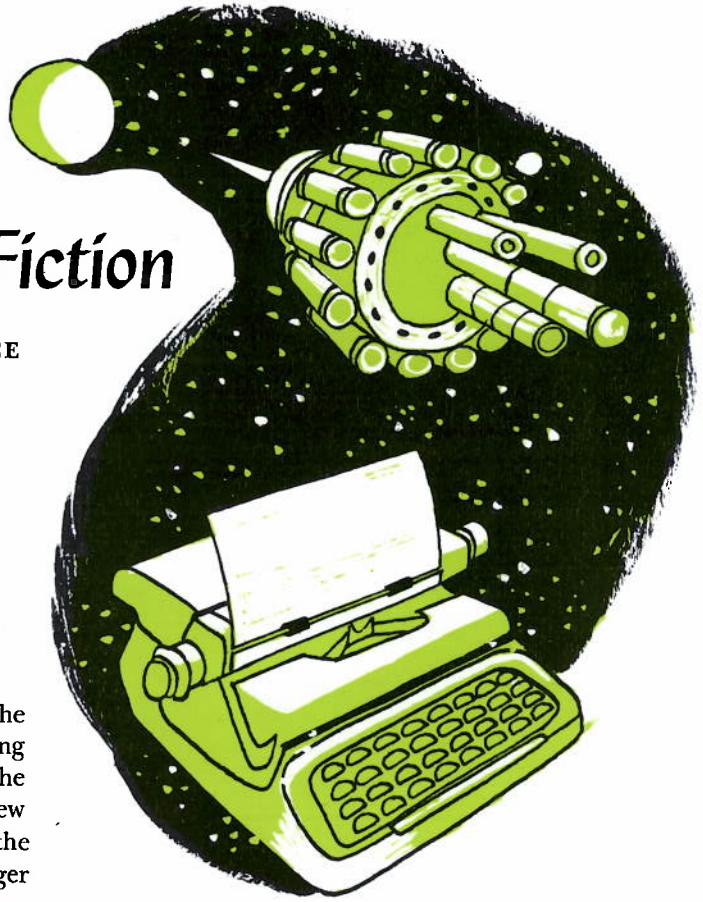
I	II
23. not understandable	turn one's head
24. far superior to	keep one's head
25. understand	make head or tail of
26. make one vain	over one's head
27. remain calm	take it into one's head
28. get a notion	by a head
29. be proud	hang one's head
30. keep oneself alive	out of one's head
31. insane; raving	hold one's head high
32. be ashamed	head and shoulders above
33. by a small margin	keep one's head above water

3

FACT Catches Up with Fiction

IN THE WORLD OF SCIENCE

by Isaac Asimov



Based on "Fact Catches Up with Fiction" by Isaac Asimov, New York Times Magazine. Copyright 1961, New York Times.

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1 In the 1930s, space flight was virtually the exclusive property of a small group of young people, most of them in their teens. They were the readers and writers of science fiction, a new literature that dealt with the unknown of the future. The young authors wrote of the danger of nuclear warfare and of the struggle to achieve space flight. At that time the outside world was largely unaware that science fiction, or even the concept of space flight, existed. Those who did know about science fiction called it "escapism." The writers might have been escaping from the reality of the present into the possibilities of the future. On the other hand, their "escaping" might better have been called foresight.

2 Now the world has entered the age into which science-fiction authors "escaped" a generation ago. The front pages of the newspaper read like some of the highly imaginative stories of the thirties. As a result, science fiction is suffering from a malady that does not exist for any other branch of literature: each year sees possible plots destroyed.

3 Nothing the world can do will ever destroy the blazing six-shooter of the Western hero, or the effectiveness of a strychnine in the soup. But since a successful lunar flight has been made, no science-fiction writer can ever again sit down to compose an epic on an imaginary first flight to the moon. Another basic plot is dead.

4 This has been happening ever since science began its drive to remake the world, and remake it, and remake it. Edgar Allan Poe knew only the balloon as a means of lifting man from the ground, so he wrote of sending a balloon to the moon. That's dead now; we know the limitations of balloons. Other writers sent their heroes to unknown places on the earth's surface—Lilliput in the South Seas, King Solomon's mines in Africa, isolated remnants of the Inca civilization in the Amazon, and Shangri-La in Tibet. All these are dead now, for we know the surface of the earth too well. There are no mysterious civilizations; even the poles have been ransacked.

5 Fictional expeditions were sent to the center of the earth and to the bottom of the oceans. But the earth has no convenient holes in it, we know now, and the bottom of the ocean has been reached.

6 The first half of the twentieth century saw stories about the mysterious power of the atom

and about space flight. The atom bomb, by exploding, destroyed a vast array of plots that used imagined atom bombs as the science-fiction gimmick, and now we are on the verge of killing stories dealing with at least the beginning of space colonization. Whatever is there left to write about?

7 To answer that question, it is important to realize a few things about science fiction. The obvious motive for writing is to earn an honest living, and the obvious motive for reading is to be entertained. But this holds true for all kinds of literature—the mystery, the western, the romance, the adventure story. Science fiction differs from its cousins in having something extra to give. This fact is obscured by the ridiculous travesties called science fiction that are produced in Hollywood, and by the similar nonsense found in comic books. Unfortunately, it is these low-level products that the average person thinks of as science fiction. There are, however, thoughtful science-fiction stories that soberly consider the action of man on society and society on man.

8 In this, science fiction at its most thoughtful resembles the serious novel. But science fiction goes further in one respect: it does not deal with society as it exists, but with societies that may exist in the future. This turning to the future has an importance that is certainly evident now, for society will not long exist if its leaders do not consider the future and make provision for it. Truly important science fiction poses a social problem and suggests a possible outcome, though not necessarily a solution.

9 For instance, a number of years ago, Robert A. Heinlein wrote a novelette dealing with the development of atomic weapons by the United States and their use in ending a war. Considering that the story was written in 1941, this was pretty good, but not remarkable. Many science-fiction writers were busily developing one form or another of an atom bomb. But the real function of science fiction is not to predict the next gadget; this is comparatively easy to do. It is more difficult to predict the *consequences* of that gadget for man and society, and it was this that Heinlein went on to do—correctly. In his story, after the weapon was used and the war ended, people were faced with the problem of controlling the deadly atomic menace. One person suggested that the United States simply keep control and enforce a world order to its liking, but the hero of the story replied that it was not as easy as that. He pointed out that atomic weapons could not long remain the secret of one nation. He said that once other nations had developed them, the world would be like a room full of armed people, each dependent on the goodwill of the others to stay alive.

10 It was more important to have foreseen the nuclear stalemate that now exists than to have predicted any number of gadgets. If, twenty years ago, more statesmen had seen the future as clearly as this science-fiction writer did, we might not be in the deadly situation that now exists.

11 Robert Heinlein posed a social problem: How could disaster be prevented once a weapon capable of destroying the human race was in the hands of opposing forces in an unsettled world? The outcome of his story suggested that mankind might find no way of preventing disaster. The title of his story was "Solution Unsatisfactory."

12 There are any number of social problems that concern the thoughtful science-fiction writer. There may be no point in discussing satellites and astronauts, but what about the future effects of these developments upon ourselves? It is easy enough to think up problems that deal not with space flight itself but with the consequences. Such problems can be far more important than any number of engineering trivialities.

13 Today many of the problems with which science fiction deals do not involve space flight at all, but are to be someday encountered right here on earth. Chief among them is the population explosion and its consequences. Story after story is written about societies in which crowding has reached unbearable proportions. It is as easy to foresee an overcrowded world now as it was to foresee nuclear weapons in the thirties. It is important to foresee the consequences as well as the fact.

14 Among the serious problems that concern science-fiction writers is the increasing specialization in science. Scientists working in one narrow field are finding it hard to communicate with those working in other special fields. There

is difficulty in training enough scientists broadly enough. Will the system of education break down of its own weight? How do we conserve brainpower and make use of the rare minds that can master many specialties?

15 How will mankind be affected by the further development of automation? With machines to do the routine working and thinking, what will happen to the vast majority of those who are capable of doing only routine work? Will education be drastically revised? Will boredom be a deadly epidemic of the future? Is mental telepathy possible, and what kind of world would we live in if thought transference were made a common means of communication? Would there be a telepathic upper class and a nontelepathic lower class? How might fallout affect the future of the race? How might . . . ?

16 What has scientific progress left to science fiction? What remains to write about? Everything.

HOW WELL DID YOU READ?

Did you read carefully?

1. **In the 1930's science fiction was**
   - **A** virtually unknown
   - **B** becoming popular
   - **C** considered inferior

2. **The author believes that writers use science fiction as a means of**
   - **A** escaping from reality
   - **B** giving unlimited rein to pure imagination
   - **C** foreseeing the future

3. **A modern science-fiction writer would not send his characters to the moon in a balloon because**
   - **A** spaceships are faster
   - **B** such a flight has been proved impossible
   - **C** the theme is no longer a novelty

4. **Having conducted a successful lunar flight means that**
   - **A** science-fiction stories about lunar flight are very popular
   - **B** people are no longer interested in reading about lunar flight
   - **C** lunar flight is no longer a valid theme for science fiction

What did the author say?

5. **Heinlein's science-fiction novelette was remarkable because it**
   - **A** dealt with the atomic bomb before it was developed
   - **B** predicted the atomic blast at Hiroshima
   - **C** foresaw the nuclear stalemate

Did you grasp the comparisons?

6. **Good science fiction differs from the mystery story and the western in that it is**
   - **A** not written to earn money
   - **B** not written to entertain
   - **C** more concerned with social problems

7. **The serious novel is different from science fiction in that it**
   - **A** does not deal with social problems
   - **B** deals with the future
   - **C** concerns itself with existing societies

What does the author think?

8. **The main characteristic of science fiction is that it**
   - **A** imagines and describes gadgets and inventions of the future
   - **B** predicts events that actually take place
   - **C** pictures the consequences today's actions will have

9. **The material called science fiction today includes**
   - **A** only writing of good quality
   - **B** some material the author would not call science fiction
   - **C** writing of better quality than that of the 1930s

10. **As fact catches up with fiction, science fiction will**
    A die out
    B be forced to change its purpose
    C find increasingly more plots

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. general notion; idea *(1)*
2. illness *(2)*
3. remaining pieces *(4)*
4. searched completely through *(4)*
5. arrangement; display *(6)*
6. mockeries; crude imitations *(7)*
7. complete standstill *(10)*
8. unimportant matters *(12)*
9. keep; protect *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. blazing *(3)*
    A chipping off bits of tree bark
    B burning steadily
    C flashing

11. soberly *(7)*
    A seriously
    B without exaggeration
    C not drunkenly

12. order *(9)*
    A arrangement of things
    B command
    C honorary society

13. rare *(14)*
    A partially raw
    B unusually good
    C thin-textured

14. class *(15)*
    A group of students taught together
    B division of society
    C quality; style

C. The **prefix** *ob-* means "against," "toward," "to," or "very." Its spelling often changes according to the word with which it is combined. It usually becomes

oc before *c*	*op* before *p*
of before *f*	*o* before *m*

Directions: Decide which form of the prefix *ob-* goes with each word part below. Add the prefix and write the word.

15. __press	20. __tain
16. __ject	21. __pose
17. __fend	22. __mit
18. __cur	23. __cupation
19. __trusive	24. __scure

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says.

He didn't *make it* to work on time.

Make it is an idiom meaning "arrive successfully." This meaning is different from the meaning of *make* plus the meaning of *it.*

Directions: Read the following idioms built on the word *make.* Write the idiom that best fits each sentence.

make a meal of	make up
make off with	make or break
make-believe	make do
make for	make much of
make out	

25. People exaggerate when they _____ small things.
26. Children love to play _____ games.
27. He can _____ crackers and cheese.
28. He has a chance to show whether or not he has talent; this job will _____ him.
29. The watchman was asleep and let the thieves _____ some valuable equipment.
30. It is difficult to _____ his handwriting.
31. We must _____ with what we have.
32. Many instruments _____ an orchestra.
33. A tired swimmer should _____ land.

UPI/Bettmann Newsphotos

An Artist's Story

by Carolyn Gloeckner

1 At the age of twelve, Georgia O'Keeffe knew that she wanted to be an artist, for it was, she decided then, the only kind of work that would allow her complete independence. Sixteen years later, in 1915, O'Keeffe was employed as an art instructor in a small South Carolina teacher's college, and had bundles of drawings and paintings, as well as many awards, to show for years of diligent work. In her tiny rented room, she evaluated her life.

2 She possessed, it was true, complete technical command of the tools and materials of the artist, but she had been unable to sell her work to support herself and had had to leave art school, first to work as a commercial artist illustrating advertisements, and then to teach. She realized that she had none of the independence and freedom she had associated with being an artist, for she could not live where she wished or go where she wished, or even, in the conservative South Carolina college where she taught, say what she wished.

3 After collecting her most recent works and hanging them on the walls of her little room, O'Keeffe studied each with total detachment and concluded that they were entirely derivative. Every drawing, every painting, showed the influence of some other person: this one painted to please a professor, that one done in another artist's style.

4 Feeling disgusted, O'Keeffe concluded that if she could not say what she wished, at least she could paint what she wished and say what she wanted to when she painted! She put the drawings and paintings and boxes of watercolors away, determined to make her work entirely her own, using only the forms in her brain.

5 Daily, after her classes, she spread sketch paper on the floor of her room and spent hours transferring the images in her mind onto the paper with charcoal. What would others make of

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these images? O'Keeffe couldn't show the completed drawings, unconventional as they were, to anyone at the college, so she sent several to New York, to an old school friend, Anita Pollitzer, who found them striking and powerful, unlike anything she'd ever seen before. Pollitzer decided to show them to Alfred Stieglitz, a famous photographer who ran an influential art gallery in the city.

6 Stieglitz was imperious and critical and O'Keeffe was extremely sensitive about who saw her work, but Pollitzer was so positive of her friend's talent that she marched boldly into the gallery and presented Stieglitz with some drawings. He examined them wordlessly, solemnly, and then excitedly pronounced them extraordinary.

7 A correspondence developed between them—the middle-aged photographer and the young artist, and the following spring, when O'Keeffe came to New York for some special teacher training, Stieglitz borrowed some of her charcoals for an exhibition at his gallery. The bold black-and-white drawings, with their sweeping, mysterious shapes, elicited extreme reactions, horrifying some people and intriguing others.

8 That autumn, O'Keeffe traveled to Texas to teach in a small college south of Amarillo. There she began to paint again, using the stark Texas landscape as her subject, painting the boundless blue western sky and the red canyons below.

9 The following spring Stieglitz produced a special one-woman exhibition of these works. Unsigned and untitled, they drew accolades from art critics and patrons, and Stieglitz sold one for $400. Shortly afterward, O'Keeffe returned to New York to attempt again to make her living as an artist.

10 The association between Stieglitz and O'Keeffe grew into a deeper relationship and they married in 1924. Stieglitz admired O'Keeffe's frankness and honesty. At a time when women had elaborate hairstyles and heavily ornamented clothing, O'Keeffe wore severe black dresses and suits, pulling her dark hair back into a coil at the nape of her neck. She was never ingratiating, but always said exactly what she thought—or said nothing at all. Through the years of their marriage, she retained her independence and was known as Georgia O'Keeffe, artist, never as Mrs. Stieglitz, wife of the famous photographer. O'Keeffe traveled where she desired, painting as she liked, and Stieglitz continued to exhibit her paintings, always one of her greatest admirers.

11 O'Keeffe's subjects changed as her life changed, for she painted the world as she experienced it, choosing subject matter and approaches as it suited her. In New York with Stieglitz, she painted the city, the tall, geometric shapes of skyscrapers rendered in soft, clear colors.

12 She also painted flowers, wanting to express the emotions she experienced in contemplating a flower and affect others with the same feelings. Her solution was to paint single, luminous blooms that filled huge canvases with their delicate, arching petals—elegant paintings that established O'Keeffe as a luminary of the art world. "When you take a flower in your hand and really look at it, it's your world for the moment," she said. "I want to give that world to someone else. Most people in the city rush around so, they have no time to look at a flower. I want them to see it whether they want to or not."

13 O'Keeffe was prolific, painting continually, steadily, and she moved from one subject to the next as easily as she moved from one location to another. Seashells and seaweed in Maine, the maples and birches that surrounded the upstate New York lakehouse where she summered with Stieglitz, skulls and bones plucked from the desert sands of New Mexico—these were her favorite subjects, painted over and over again. Sometimes the paintings were realistic, sometimes abstractions, her brushstrokes rendering each object and setting with technical precision, in the purest colors possible, always in her peculiarly bold, individual style.

14 She spent an increasing amount of time in New Mexico, finally settling there shortly before Stieglitz died in 1946. After his death, his New York gallery was closed, and O'Keeffe herself had to begin selling her paintings and directing the business end of her career. She resented having to spend time away from her painting, but she knew what she wanted and was unrelenting in her attention to the details of exhibiting and selling her work. Her subjects continued to change, some motifs repeating themselves over and over, disappearing for a time only to reappear in new permutations years later, and some appearing only once.

15 As she entered her seventies, O'Keeffe remained as busy as ever, surprising critics in 1960 with an exhibition filled with fresh approaches and

new subjects. O'Keeffe had been inspired by her cross-country air trips to paint the undulating forms of rivers. These journeys revealed not only new landscapes but a novel view of clouds as seen from above. In 1965, she painted the largest picture she had ever attempted, 24 feet long by 8 feet high, a vista of puffy white clouds on a backdrop of purest blue.

16 Some critics called the work op art, but O'Keeffe could not be classified. Her work was not impressionism, expressionism, surrealism, neither pop art nor op art. Her style was her own and she refused to be connected with any school of art.

17 In 1971, at eighty-four, O'Keeffe began to lose her sight to an untreatable condition related to aging. Even with reduced vision, however, she continued to paint—elegant, spare, simple works, with her New Mexico surroundings as her subjects. When she reached her mid-nineties, interest in her work intensified, and a lavishly illustrated art book and documentary were produced on O'Keeffe and her work. Several of her paintings sold for over $100,000.

18 Georgia O'Keeffe died on March 6, 1986, at the age of ninety-eight. Art critics who label her one of the preeminent twentieth-century artists say that O'Keeffe succeeded as an artist because she was always faithful to her own thoughts and feelings. Through her paintings, she expressed herself with simplicity and honesty, providing others with an intensely personal glimpse of her view of the world.

HOW WELL DID YOU READ?

Did you notice the details?

1. **Unable to support herself with painting, O'Keeffe worked as a teacher and**
   - **A** illustrator
   - **B** artist's model
   - **C** art critic

2. **Shortly after Stieglitz exhibited O'Keeffe's charcoal drawings, O'Keeffe**
   - **A** quit teaching to become a full-time artist
   - **B** went to New York for teacher training
   - **C** went to Texas to teach

Did you get the point?

3. **The main idea of this article is that Georgia O'Keeffe became a successful artist because**
   - **A** she was always true to her innermost feelings
   - **B** a famous photographer became her mentor and friend
   - **C** she worked hard promoting her work

4. **O'Keeffe painted huge flowers on huge canvases because**
   - **A** she wanted people to take notice of the flowers and see them as she did
   - **B** she could get clearer, purer colors when her work was larger
   - **C** she wanted to get as many flowers into a picture as she could

5. **O'Keeffe sent her drawings to a friend in New York because she wanted to**
   - **A** make sure Alfred Stieglitz saw them
   - **B** share them with another person
   - **C** find out if they were good enough to sell

Did you notice the comparisons?

6. **Compared to the life she had expected to lead, O'Keeffe, in 1915, felt herself to be less**
   - **A** influenced by others
   - **B** prosperous
   - **C** free

7. **Compared to the paintings she had done before 1915, those she did while teaching in a small college near Amarillo were**
   - **A** uniquely her own
   - **B** less pleasing to others
   - **C** more realistic

Can you make the right inference?

8. **In her choice of subject matter, O'Keeffe drew most heavily from**
   - **A** plants and flowers
   - **B** the city
   - **C** nature

9. **The author of this article feels that the turning point of O'Keeffe's life was the day**
   - **A** she decided to become an artist
   - **B** she decided to paint what she wished
   - **C** Stieglitz saw her charcoal drawings

10. The author's purpose in describing Georgia O'Keeffe's clothing, hairstyle, and manner is to show

A her unusual beauty
B her simplicity and honesty
C her youth and inexperience

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. contrary to established rules, unusual *(5)*
2. overbearing, commanding *(6)*
3. evoked; brought out *(7)*
4. praise *(9)*
5. notable or outstanding person *(12)*
6. determined; unyielding *(14)*
7. changed forms *(14)*
8. winding; waving *(15)*
9. superior; above all others *(18)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. command *(2)*

A mastery
B domination
C authority

11. conservative *(2)*

A careful or cautious
B favoring established ideas
C tending to preserve

12. detachment *(3)*

A absence of bias
B physical separation
C lack of interest

13. stark *(8)*

A downright extreme
B harsh or barren
C blunt, to-the-point

14. rendering *(13)*

A converting
B restoring
C imparting

C. Often you have a key to the meaning of an unfamiliar word if you are able to recognize the **root** word on which it is built.

Directions: Each pair of words in column I is built on one root. Decide what the root is, and find its meaning in column II. Write the meaning.

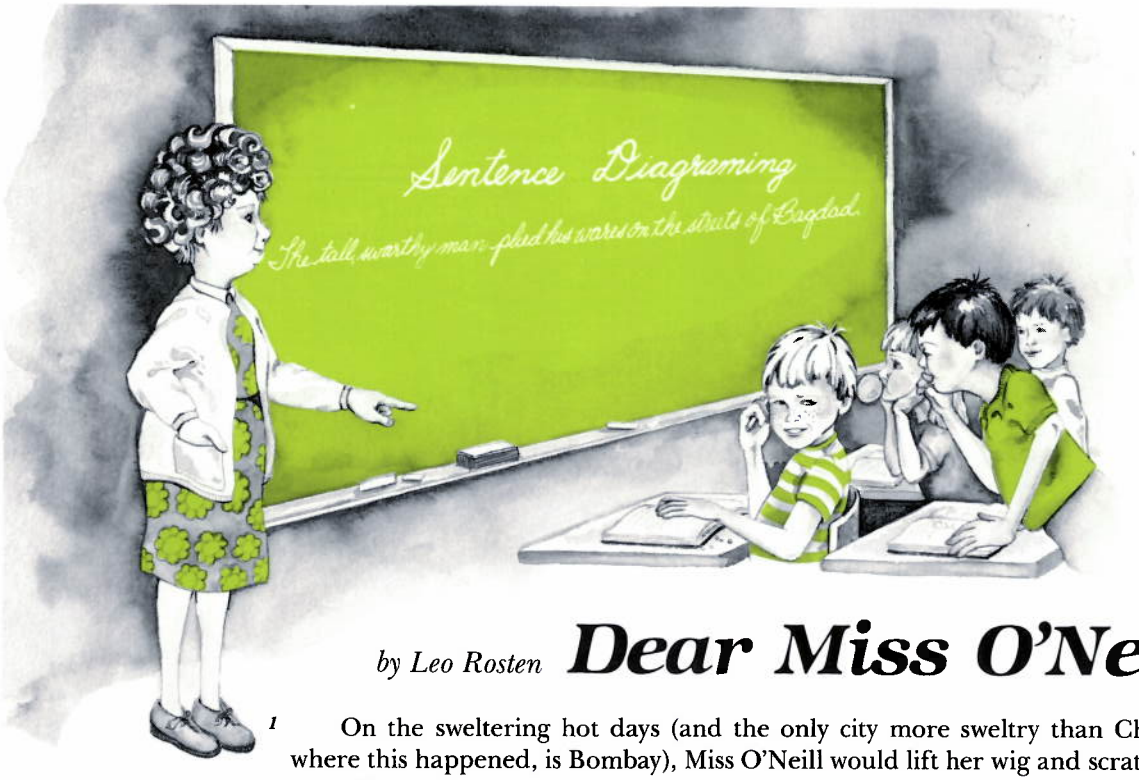
I	II
15. vivid; vivacious	roll
16. revolver; revolution	hand
17. patient; pathology	twist
18. auditorium; inaudible	hang
19. manacle; manufacture	live
20. tortuous; contort	loosen
21. depend; appendix	disease
22. solve; solution	hear

D. Synonyms are words that have the same or nearly the same meaning. **Antonyms** are words that have opposite or nearly opposite meanings.

Directions: Look at each pair of words below. Decide whether they are synonyms, antonyms, or neither. If they are synonyms, write **S**; if they are antonyms, write **A**; if they are neither, write **N**.

23. irate — relate
24. calculate — figure
25. anecdote — story
26. controversy — agreement
27. roughly — approximately
28. routine — extraordinary
29. inanimate — private
30. intelligently — stupidly
31. rigid — inflexible
32. uncannily — weirdly
33. complicated — complex

5



by Leo Rosten

Dear Miss O'Neill

1 On the sweltering hot days (and the only city more sweltry than Chicago, where this happened, is Bombay), Miss O'Neill would lift her wig and scratch her pate. She did it absently, without interrupting whatever she was saying or doing.

2 I always watched this with fascination. Miss O'Neill was our seventh-grade teacher, and it was the opinion of my cynical classmates that Miss O'Neill had, until very recently, been—a *nun.* That was the only way they could explain the phenomenon of her wig. Miss O'Neill, they whispered, had left her holy order for mysterious, heart-rending reasons, and by some extraordinary stroke of bad luck had been commissioned to teach the non-Catholic hellions in the George Howland Elementary School on Sixteenth Street.

3 Miss O'Neill was dumpy, moonfaced, pale, colorless, and we hated her. We hated her as only a pack of West Side barbarians could hate a teacher of English. She was a thirty-third-degree perfectionist who drilled us—constantly, endlessly, mercilessly—in spelling and grammar and diction and syntax. She had a hawk's eye for error, for a dangling participle or an upright *non sequitur* or a "not *quite* right" word.

4 Whenever one of our runny-nosed congregation made a mistake, in composition *or* recitation, Miss O'Neill would send the offender to the chalkboard to "diagram" the sentence. Going to the chalkboard for the public self-exposure of a grammatical tort, which in Miss O'Neill's eyes partook of at least slight sin, was the classroom torture we most resented.

From PEOPLE I HAVE LOVED, KNOWN OR ADMIRED *by Leo Rosten. Copyright © 1970 by Leo Rosten. Adapted and reprinted by permission of the author.*

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5 Miss O'Neill's diagraming made us lay bare the solid, irreducible anatomy of a sentence. We had to explain how each part of a sentence works, and how the parts fit together, and how they mesh and move to wheel out meaning. We had to uncover our mistakes ourselves, "naked to our enemies," then offer a correction and explain the reason for *that*—all as Miss O'Neill quietly waited.

6 And if an offered correction was itself wrong, Miss O'Neill compounded the heartlessness of her discipline by making the culprit parse *that* on the board, and see where and why *that* was in error, and how *that* must now be remedied. It was inhuman.

7 Some kids broke into the sweats as they floundered around at the chalkboard, guessing at (and failing to pinpoint) their mistake, praying that Miss O'Neill would end the fearful ordeal either by identifying the awful error herself or, at least, by hinting, eyebrowing, murmuring a sound (positive or negative) that might guide them to the one true redeeming answer. But that Miss O'Neill would never do; instead, she shifted her questioning from the criminal at the chalkboard to the helots in the chairs. "Well, class? Who sees the mistake? . . . Jacob? No? . . . Sylvia . . . My, my . . . Harold? . . . Annie . . . Joseph? . . . Come, come, class; you must concentrate. There is an error—an error in grammar—on that chalkboard. . . ." So pitiless and unyielding was her method.

8 What added frustration to our grievance was the fact that Miss O'Neill never lost her patience, never grew angry, never even raised her voice. Worse, she was undisturbed by the sly violations, the simulated incomprehensions, with which our most talented saboteurs baited and riled other teachers. Nothing disturbed Miss O'Neill's tight, shipshape classroom. She was unrufflable. She simply ignored, or outflanked, the tricks and traps and malingerings of our minor Machiavellis. Nothing hindered the steady pace and purpose of her tutelage.

9 I say that my comrades and I hated Miss O'Neill—but that is not entirely true. I only pretended to hate her. In our sidewalk gatherings, on weekends, when we mourned the unaccountable defeat of our noble Cubs by the disgusting White Sox; or when we matched extravagances about what we would do if we happened to find *ten million dollars* at that very moment; or when we licked our Eskimo Pies and, for the umpteenth time, shared fantasies about one or another seventh-grade nymph—sooner or later our Miss O'Neill would be damned by some indignant freeman, and I would at once join in the howlings about her cold-blooded despotism, cursing her as ardently as any of my companions: So strong is the desire of a boy to "belong," to be no different from the grubbiest of his fellows.

10 But secretly, my respect for Miss O'Neill—nay, even my affection—mounted, week by week. I was exhilarated by what I can only call the incorruptibility of her instruction. I found stirring within myself a sense of excitement, of discovery, a curious quickening of the spirit that attends initiation into a new world.

11 Though I could not have explained it in these words, I sensed that frumpy Miss O'Neill was leading me, not through the musty maze of English composition, but into a sunlit realm of order and meaning. Her iron rules, her inflexible demands, her precise corrections, were not, to me, the torment or irritation they were to my companions. They were sudden flashes of light, giddying glimpses of the magic that hides within the arrangement of words, intoxicating visions of that universe that awaits understanding. It was as if a cloak of wonder had been wrapped around the barren bones of grammar.

12 For it was not just grammar or diction or syntax to which Miss O'Neill, whether she knew it or not, was introducing me. She was revealing language as the vehicle for thinking, grammar as the servant of logic, diction as a chariot for the imagination, the prosaic sentences as the beautiful, beating life of the mind at work. She was teaching what an earlier generation called "right reason."

13 Miss O'Neill did not try to please us. She didn't try to like us. She certainly made no effort to make us like her. She valued results more than affection, and, I suspect, respect more than popularity.

14 She was not endowed with either loving or lovable attributes, and she did not bother regretting it or denying it or trying to compensate for it. She went about her task with a forthright "I want" or "You go" instead of the sanctimonious "Shall we?" She concentrated solely on the transmission of her knowledge and the transferring of her skill.

15 I think Miss O'Neill understood what foolish evangelists of education are bound to rediscover:

that drill and discipline are not detestable; that whether they know it or not, children prefer competence to "personality" in a teacher; that communication is more significant than camaraderie; that what is hard to master gives students special rewards (pride, self-respect, the unique gratification of having succeeded) precisely because difficulties have been conquered, ramparts scaled, battles won; that there may be no easy road at all to learning some things, and no "fascinating" or "fun" way of learning some things really well.

16 Popular teachers often leave residues of uncertainty in their pupils, even, I think, suspicions of things untested, therefore unresolved. Children's unease with ambiguity, especially when it is the product and the price of lenience, surely leads to discontent. But "hard" teachers earn gratitude— perhaps not immediately, perhaps not stated, no doubt grudging—for respecting the *subject* no less than the student, for teaching in a manner that refuses to diminish the subject's size or dilute its importance.

17 Miss O'Neill must long ago have retired from her mission to elementary-school aborigines. Perhaps she has been called from this unkind world to don wings—and, I hope, golden locks, to replace the wig under whose gauzy base she scratched her relief from itching on those broiling days in Chicago. If she is still alive, she must be in her dotage: I hope she somehow gets word of these sincere thanks, so long belated—for a task so well performed.

18 I have never forgotten what she taught me.

HOW WELL DID YOU READ?

What was the author's purpose?

1. What was the primary purpose of the story?
- **A** To inform
- **B** To persuade
- **C** To entertain

Did you understand the characters?

2. Miss O'Neill can best be described as
- **A** popular but demanding
- **B** intelligent and diligent
- **C** well meaning but careless

3. Which word could not be used to describe Miss O'Neill?
- **A** Timid
- **B** Patient
- **C** Firm

4. Which statement best describes how the author felt about his classmates?
- **A** He disliked them and disagreed with them.
- **B** He liked them but didn't agree with them.
- **C** He liked them and agreed with them.

5. The author thought of Miss O'Neill with
- **A** affection and gratitude
- **B** dislike but appreciation
- **C** bitterness and disappointment

How carefully did you read?

6. The story is told from the point of view of
- **A** Miss O'Neill
- **B** the seventh graders
- **C** the author

7. The author's classmates thought Miss O'Neill had once been a nun because she
- **A** was a strict disciplinarian
- **B** never laughed
- **C** always wore a wig

Can you draw the right conclusions?

8. The story implies that the seventh graders at George Howland Elementary School were
- **A** fairly well behaved but uninterested in school
- **B** troublemakers who hated school
- **C** interested in school but not very bright

9. Miss O'Neill and the "foolish evangelists of education" differed in that Miss O'Neill believed that
- **A** learning should be fun
- **B** students must like a teacher to learn
- **C** drill and discipline are important

10. From the information in the story, the reader can infer that the author left Miss O'Neill's class with a
- **A** thirst for knowledge
- **B** love for words
- **C** distrust of teachers

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. head; crown of the head *(1)*
2. take apart; describe grammatically *(6)*
3. discouragement *(8)*
4. fake; imitated *(8)*
5. guiding influence; instruction *(8)*
6. freedomless rule; absolute power *(9)*
7. a feeling of fellowship *(15)*
8. lack of strictness *(16)*
9. second childhood; state of mental decay *(17)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. lift *(1)*
- **A** elevate; raise up
- **B** put an end to
- **C** steal

11. order *(2)*
- **A** state of peace; absence of chaos
- **B** sequential arrangement of things
- **C** special religious group

12. pack *(3)*
- **A** heap; pile of related objects
- **B** group of persons
- **C** cosmetic paste

13. baited *(8)*
- **A** provided with food
- **B** attacked viciously
- **C** nagged or teased

14. attends *(10)*
- **A** accompanies; goes with
- **B** looks after; takes charge of
- **C** visits professionally

C. Often you have a key to the meaning of an unfamiliar word if you are able to recognize the **root** word on which it is built.

Directions: Each pair of words in column I is built on one root. Decide what the root is, and find its meaning in column II. Write the meaning.

I	II
15. optometry, optical	empty
16. vacate, vacuous	wheel
17. vulgar, divulge	God; deity
18. candid, incandescence	eye
19. rotate, rotor	drive
20. dissect, section	white; glowing
21. impulse, repulsive	common
22. polytheism, theological	cut

D. Synonyms are words that have the same or nearly the same meaning. **Antonyms** are words that have opposite or nearly opposite meanings.

Directions: Look at each pair of words below. Decide whether they are synonyms, antonyms, or neither. If they are synonyms, write **S**; if they are antonyms, write **A**; if they are neither, write **N**.

23. lighting — illumination
24. permanent — temporary
25. submersible — drowning
26. true — genuine
27. crammed — stuffed
28. convert — alter
29. confine — liberate
30. complex — reflexive
31. sparsely — thinly
32. techniques — methods
33. maximum — minimum

The "UPSTART CROW"

A YOUNG ACTOR NAMED SHAKESPEARE

by Genevieve Foster

Adapted slightly from The World of Captain John Smith, *pp. 71-76, by Genevieve Foster.*
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1 It was in 1593 and the spring of the year. A young man jauntily made his way through London's crowded, narrow streets—through old St. Paul's churchyard to the sign of the White Greyhound. The White Greyhound was a stationer's shop, where his first book of poetry was being offered for sale.

2 Perhaps some passerby recognized the young man, for William Shakespeare, who had recently celebrated his twenty-ninth birthday, was already a well-known actor. He was a favorite of those who patronized London's fledgling theaters, from the commoners who stood in the rowdy pit to the bejeweled lords and ladies of the court.

3 A scrap of paper caught Shakespeare's attention, and he paused to examine it. There, posted for all London to see in public advertisement, was the title page from his new book. It showed up very well among all the other notices stuck on posts along the street. Richard Field, a friend from Will's hometown of Stratford, was the printer and publisher who had turned Shakespeare's first "literary" efforts into a handsome little volume. Shakespeare had already written many plays, but they did not count as literature; they were written only for actors to use. Therefore it was particularly gratifying to see his name standing out so clearly in the advertisement. This volume was different—now young Shakespeare was a published author.

4 He sincerely hoped that the popular young Earl of Southampton, to whom he had dedicated the poem, would enjoy it. His Lordship was only nineteen, just the right age, it seemed to Shakespeare, to appreciate a retelling of the old, familiar tale of Venus and Adonis, of the lovesick goddess who wooed the young hunter but failed to win the "rosy-cheeked" lad, since it was

"hunting he loved and love he laughed to scorn."

5 If the earl was pleased with the poem and the dedication, he would undoubtedly pass it about among his many friends at court. That should make it popular—and profitable, which was just as important to a young writer who needed to make a living.

6 Noblemen who wrote verse, as most of them did, could afford to be less commercial. Their poetry, handwritten with appropriate flourishes, was circulated among their friends at court. This was of course more elegant and exclusive than having it printed.

7 But young university graduates of Cambridge and Oxford, whose writing was also a means of livelihood, were definitely eager to see their works published. The home of Sir Walter Raleigh was a favorite rendezvous for a number of these aspiring writers from the universities. Among them the most brilliant, in Will Shakespeare's estimation, and the one he most earnestly admired, was Christopher Marlowe.

8 There was no question of Marlowe's genius; his play *Tamburlaine the Great* was truly original, the first English play to be written in blank verse. Shakespeare was so impressed with its style, when he saw it produced, that he later adapted this style for his own *Henry VI*.

9 *Henry VI* was an overwhelming success, perhaps partially because Shakespeare drew characters from actual English history. The audiences liked it immensely. It proved so popular, in fact, that it aroused the ire of a sharp-tongued writer by the name of Robert Greene. Greene also wrote plays, and successful ones, but he had no respect for "ignorant" actors, who merely repeated "the words that playwrights put in their mouths to say, having no thoughts of their own."

10 "Actors," he said, "are like the crow in Aesop's fables, who decked himself out in other birds' feathers."

11 It was irritating enough to Greene that actors made more money than he did; when he saw an "upstart crow" of an actor set himself up as a playwright, his pent-up wrath exploded into words. Greene pounced on a line in the play *Henry VI*, in which the Duke of York rails against a wicked queen, saying: "O tiger's heart wrapped in a woman's hide!" Seizing his pen, he wrote, "There is an upstart crow, who, with his tiger's heart wrapped in a player's hide supposes he is as well able to bombast out blank verse as the best of you and, being an absolute jack-of-all-trades, is in his own conceit the only SHAKE-Scene in the country." He then went on to beg Christopher Marlowe and the other poets to take warning from his own poverty-stricken state, and not waste their time writing plays.

12 Greene died shortly afterward, but the vituperative attack was published. Shakespeare's friends, many of whom were important and influential people, rushed to his support in the aftermath of the unfortunate incident. A few months later the publisher, Henry Chettle, made an apology in which he spoke not only of Shakespeare's acting and poetic abilities, but also of his honesty and integrity.

13 Perhaps it is just as well that Greene died too soon to see the further invasions of his field the "upstart crow" would make. It was the very next spring that *Venus and Adonis* was published, and in the following eight years eight reprints were issued. Undergraduates at Cambridge, it was said, slept with copies of it under their pillows.

14 The author immediately wrote another poem and dedicated it to his wealthy and influential young sponsor. It was fortunate that this poem too was profitable, for as an actor, William Shakespeare was temporarily without employment. The three theaters in the London area were closed because of the plague, an epidemic that was killing a thousand persons every week. Since it was known that large gatherings of people caused the plague to spread, the theaters were closed late in 1592 and were not reopened for two years.

15 The closing of the theaters left a gap in the lives of many Londoners. Queen Elizabeth loved the theater; so did the majority of her subjects. Even the poor would pay their hard-earned pennies to see an entertaining performance full of blood, thunder, and excitement. One group, however, welcomed the closing—the Puritans. Proponents of this religion believed that all theaters were temples of sin that should be destroyed. Actors, they said, were "fiends, hell hounds, and vipers" sent by Satan to lure people to eternal damnation with their glitter

and tinsel. In fact, the Puritans vowed that the London plague was retribution from God for the existence of the city's theaters.

16 Little is known of how Shakespeare occupied himself during this involuntary absence from his work. Perhaps he returned to his hometown, Stratford, and visited his wife and children. His wife, who had been Anne Hathaway before she married, was eight years her husband's senior. She had been brought up in a Puritan household. Perhaps this was the reason she refused to reside in London with him—or perhaps it was because she preferred to bring up her children in Stratford, where they could go to the good free school their father had attended.

17 If Shakespeare returned to Stratford, he probably had some contact with the theater there. At least one company of traveling players, after being barred from performances in plague-ridden London, visited Stratford during the period. Perhaps they actually performed in the same building where little Will, only four years old, had first been introduced to the theatrical world.

18 However Shakespeare spent his two-year vacation from the theater, first and always he was an actor and playwright. As soon as the plague abated and the theaters were permitted to reopen, he was back in London, eager to step on stage again, and with another play, *Love's Labors Lost,* ready for rehearsal.

HOW WELL DID YOU READ?

What does the author say?

1. **Shakespeare intended *Venus and Adonis* to**
   - **A** establish his reputation as a playwright
   - **B** instruct rather than entertain
   - **C** make money

2. **The play *Henry VI* was**
   - **A** proof of Shakespeare's admiration for Marlowe
   - **B** Shakespeare's reply to critics of his style
   - **C** original in its use of blank verse

3. **Shakespeare left the theater because**
   - **A** he could find no acting work in London
   - **B** he wished to concentrate on poetry
   - **C** the Puritans had banned his plays

4. **The main reason for Greene's attack was that**
   - **A** *Henry VI* was badly written
   - **B** Shakespeare was an actor
   - **C** Greene was a failure at writing plays

Did you recognize the attitudes?

Write the letter that stands before the word best describing the attitude of each of the following toward acting.

5. **Puritans**
   - **A** horrified
   - **B** bitter
   - **C** indignant

6. **Queen Elizabeth**
   - **A** doubtful
   - **B** serious
   - **C** enthusiastic

7. **Greene**
   - **A** suspicious
   - **B** cynical
   - **C** scornful

8. **Shakespeare**
   - **A** sentimental
   - **B** defensive
   - **C** professional

What is the author's purpose?

9. **The author shows Shakespeare's thoughts by**
   - **A** simply stating what they were
   - **B** quoting Shakespeare's friends and associates
   - **C** analyzing Shakespeare's plays and poems

10. **The author pictures Shakespeare primarily as**
    - **A** a flesh-and-blood human being
    - **B** an honored playwright, actor, and poet
    - **C** a poor youth struggling for fame

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. in a self-satisfied, carefree way *(1)*
2. satisfying; giving pleasure *(3)*
3. ornamental designs *(6)*
4. place of meeting *(7)*
5. anger *(9)*
6. abusive *(12)*
7. supporters *(15)*
8. punishment that is deserved *(15)*
9. decreased; slackened *(18)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. commercial *(6)*
    - **A** mainly interested in profit
    - **B** belonging to trade
    - **C** made for a market

11. blank *(8)*
    - **A** without rhyme
    - **B** empty
    - **C** expressionless

12. field *(13)*
    - **A** stretch of open land
    - **B** realm of knowledge
    - **C** background

13. players *(17)*
    - **A** musicians
    - **B** actors
    - **C** gamblers

14. world *(17)*
    - **A** practices, usages, ways of men
    - **B** public life
    - **C** class of people with common interests

C. Often you have a key to the meaning of an unfamiliar word if you are able to recognize the **root** word on which it is built.

Directions: Each pair of words in column I is built on one root. Decide what the root is, and find its meaning in column II. Write the meaning.

I	II
15. genesis, generate	hear
16. audible, audio-visual	flesh
17. manual, manuscript	self
18. carnivorous, incarnation	twist
19. egocentric, egotist	head
20. theology, monotheism	origin
21. distort, contortion	hang
22. pendent, suspense	God
23. captain, decapitate	hand

D. Synonyms are words that have the same or nearly the same meaning. **Antonyms** are words that have opposite or nearly opposite meanings.

Directions: For each word in column I, find a synonym or antonym in column II and write it.

I	II
24. jauntily	private
25. offered	strange
26. rowdy	vicious
27. public	dejectedly
28. sincerely	slightly
29. familiar	doubt
30. scorn	truly
31. question	respect
32. immensely	well-behaved
33. vituperative	presented

7

The Mathematics of Self-Deception

THE GRANGER COLLECTION, New York

Clever Hans performing a "Mathematical feat"

1 Excluding Mr. Ed, the talking horse of situation-comedy fame, the most celebrated equine intellect was Clever Hans, the turn-of-the-century trotter who, even without benefit of a TV voice-over, managed to dazzle spectators with his brilliance. The nine-year-old Hans, who was "taught" for half a decade by William von Osten, a retired German schoolteacher, meteorically rose to stardom during the summer of 1904. Each day at noon in a quiet courtyard in northern Berlin, the horse performed intellectual feats before a select company of psychologists, naturalists, educators, political dignitaries and even the kaiser himself. EQUINE PRODIGY KNOWS MUSIC AND ARITHMETIC trumpeted a headline from the *New York Times.* BERLIN'S WONDERFUL HORSE: HE CAN DO ALMOST EVERYTHING BUT TALK proclaimed the title of the follow-up story.

2 To answer a numerical problem, Hans would paw the ground with his hoof the appropriate number of times. He spelled words in a similar way, representing each letter by a certain number of pawings. Hans also communicated by shaking his head "yes" or "no" and by picking up objects with his teeth.

3 "Besides adding, subtracting, multiplying, and dividing sums," the *Times* reported, "[Hans] does expressions involving several of these operations, finds square numbers, and not only simply repeats what is taught, but solves fresh problems put to him in the absence of his master, showing a grasp of the principles of arithmetic. The stallion also forms little sentences, remembers them the next day, and discriminates twelve colors and shades, giving their corresponding names. Moreover, he distinguishes musical tones, indicating where they are situated on the chromatic scale, and picks out discords, designating which tone to omit in order

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to restore harmony. . . . Professor von Osten affirms that the horse is as well educated as a boy who has gone to school for the same number of years. . . ."

4 Although scores of astute observers witnessed Hans's mental prowess, none could explain it. In the interests of science, Von Osten opened his house and stable to a commission of eminent psychologists from the University of Berlin who subjected the perspicacious steed to a grueling month of tests. They also reviewed the method Von Osten used to teach Hans: Repeat a question again and again until the horse answers it correctly. Do not punish wrong answers but reward correct ones with a carrot, a piece of bread, or a lump of sugar.

5 While the psychologists probed Hans, his reputation as an intellectual heavyweight made him an international celebrity. He became the subject of popular couplets, and his name was sung on the vaudeville stage. Postcards and beverage labels were emblazoned with pictures of his brainy head. Children played with toys that bore his likeness. The expression "horse sense" took on new meaning.

6 The commission of psychologists reached a curious conclusion, which made front-page newspaper copy the world over: "The horse Hans does not think, but at the same time there is no trickery on the part of his trainer." The psychologists found that Hans could answer a question only if someone within his line of sight knew the answer. The people around Hans, it turned out, unknowingly cued the animal in very subtle ways, through barely perceptible movements and vocal signals.

7 Those who questioned the horse, for example, tended to incline their head slightly toward him as they watched him slowly paw out the answer to an arithmetic problem. When Hans had pawed the ground the right number of times, the questioners would unintentionally raise their head a fraction of an inch—unconsciously expecting (or hoping) that Hans was finished. Observing the raised heads, Hans would stop pawing. This explanation was verified by the psychologists deliberately elevating their head at a premature point (Hans would then stop) and their purposely keeping their head bent (Hans would then paw *ad tedium*). Moreover, if they did not initially lean toward Hans, he would not start pawing at all.

8 The psychologists asserted that even Von Osten did not know that he was subtly cuing Hans—and subsequent investigations have confirmed that he was not a con man. The cues, of course, were not fail-safe. So firmly did Von Osten believe in Hans's intelligence that when the horse gave a wrong answer, because of a cuing error or otherwise, he would attribute it to Hans's cantankerous temperament or his short attention span. Von Osten's faith in Hans was not shaken even by the publication of the psychologists' findings. He angrily denied them and spirited the horse away from further experimentation.

9 Eighty years later, Clever Hans is still part of our scientific vocabulary. To claim that an experiment is poisoned by the "Clever Hans effect" is to accuse the researcher of unknowingly influencing the response of his subjects.

10 Today, the specter of Clever Hans haunts investigators who are trying to establish the existence of extrasensory perception. In a typical test of mental telepathy, the experimenter uses a special 25-card deck, in which each card has one of 5 symbols printed on it and the deck as a whole consists of 5 cards of each symbol. The experimenter draws a card, looks at it, concentrates on the symbol and asks the subject to use his mind-reading powers to guess the symbol. Then the card is put aside, another card drawn from what remains of the deck, and the experiment repeated. In this manner, the whole deck is run through a card at a time.

11 If the subject is not telepathic, how many cards should he guess correctly on the average? Since the symbols are equally likely to arise, he is expected to get 5 of the 25 cards right. This expectation, however, will be fulfilled only in the long run—after the deck has been gone through numerous times and the results averaged. After many trials, the experimenter is apt to regard even slight deviations from an expectation of 5, say 5.1, as evidence of ESP. (Partisans of the paranormal might be equally excited by a result of 4.9. "Ah! Brain waves are being received but read incorrectly.")

12 Although few ESP investigators are as blatantly dishonest as Dr. Venkman (Bill Murray) in *Ghostbusters*, who tells the ingenue whose telepathic powers he's testing that she's made a correct guess even when she hasn't, many bias their experiments in subtler ways. Conveniently invoking the grounds that the subject may need to calibrate brain waves

to local conditions, some experimenters deliberately provide feedback after each guess. They may tell the subject what the card was (complete feedback) or they may tell him whether he was right or wrong (partial feedback). If the subject subsequently exploits this information in a purely statistical way, the expectation value will be skewed—and an ignorant experimenter may well suspect telepathy where Lady Luck is the real culprit. For example, in the case of complete feedback, the subject can always name the last card by process of elimination.

13 Sage experimenters know that they must adjust the expectation value to account for intentional feedback, but the mathematics is so complex that they may not know how to compute the adjustment. A more pernicious problem is the Clever Hans phenomenon. A naive experimenter may smile or nod in recognition of correct answers or, in full view of the subject, note correct and incorrect answers on a pad of paper. If the experimenter doesn't know that he's giving feedback, he can hardly begin to compute its effect.

14 So it appears that Clever Hans, that "cagey" equine of yesteryear, left a legacy: not a scholarly tome, but the name of an "effect" which, when present in the investigative process, will contaminate the results—and, in turn one supposes, make the outcome a horse of a different color.

HOW WELL DID YOU READ?

How exact was your reading?

1. **Clever Hans lived during the**
   - **A** late 19th century
   - **B** early 20th century
   - **C** middle 20th century

2. **What was William von Osten's profession?**
   - **A** Psychologist
   - **B** Naturalist
   - **C** Educator

3. **Clever Hans and Von Osten lived in**
   - **A** Germany
   - **B** Austria
   - **C** Hungary

4. **To unconsciously clue a subject to the right answer is an example of the**
   - **A** halo effect
   - **B** Clever Hans effect
   - **C** Hawthorne effect

Can you draw the right conclusions?

5. **The method used by Von Osten to teach Clever Hans can best be described as**
   - **A** humanistic psychology
   - **B** delayed gratification
   - **C** positive reinforcement

6. **Which of these statements best summarizes the conclusion reached by the psychologists who studied Clever Hans?**
   - **A** Clever Hans is a unique horse and, in fact, does think.
   - **B** Although Von Osten and others don't realize it, they help the horse to get the right answer.
   - **C** William von Osten employs a helper to remain out of sight and give clues to Clever Hans.

7. **Which of these best describes William von Osten?**
   - **A** Diligent and trustworthy
   - **B** Intelligent but dishonest
   - **C** Underhanded and greedy

8. **If a subject is shown 12 each of 5 different pictures (a total of 60), how many should he or she be able, on the average, to guess right?**
   - **A** 5
   - **B** 12
   - **C** 25

9. **The last sentence of the article ends with a**
   - **A** pun
   - **B** parody
   - **C** proverb

Did you understand the author's purpose?

10. **The purpose of the article is primarily to**
    - **A** persuade
    - **B** amuse
    - **C** inform

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. outstanding *(4)*
2. printed in bright colors *(5)*
3. able to be seen; noticeable *(6)*
4. disagreeable; ill-natured *(8)*
5. naive girl or young woman *(12)*
6. prejudice; influence in a certain way *(12)*
7. takes advantage of *(12)*
8. more developed in one direction *(12)*
9. destructive; injurious *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. title *(1)*

- **A** name, as of a book, story, painting, etc.
- **B** right to ownership, deed
- **C** championship

11. commission *(4)*

- **A** certificate conferring military rank
- **B** charge, command to act
- **C** group of persons directed to perform some duty

12. stage *(5)*

- **A** step, one of a series of positions
- **B** platform, place for performances
- **C** station, place of rest

13. incline *(7)*

- **A** bend forward
- **B** tend toward an opinion
- **C** deviate, or go off from, a line

14. pad *(13)*

- **A** thin, flat mat
- **B** tablet
- **C** living quarters

C. The **prefix** *inter-* means "between" or "together."

Directions: Decide the meaning of *inter-* in each word below. Write *between* or *together.*

15. interstate
16. interlace
17. interclass
18. interfere
19. interweave
20. intercept
21. interval
22. interpreter

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says. "He took up with a bad crowd" does not mean that he helped a bad crowd lift something. It means that he became involved with a bad crowd.

Directions: The idioms in column II are built on the word *take.* Write the idiom that best fits each meaning in column I.

I	II
23. to be, act, or look like	take back
24. become offended at	take for
25. retract; regain possession of	take on
26. dismantle; remove from a higher place	take it lying down
27. regard as; consider as	take over
28. cheat; trick; deceive	take off
29. submit without protest	take after
30. leave the ground	take one's time
31. begin to do; undertake	take down
32. be slow; delay	take in
33. assume control	take amiss

THE INCIDENT THAT CHANGED A MAN'S LIFE

The Piece of String

by Guy de Maupassant

1 On all the roads about Goderville, the peasants were coming toward the town, for it was market day. Some led a cow or a calf, and some carried on their arms great baskets, from which heads of chickens or of ducks were thrust forth.

2 Master Hauchecorne, from Bréauté, was walking toward the central square when he observed a remnant of string lying on the ground. Economical, like every true Norman, he thought that it was well to pick up everything that might be of use, and he stooped painfully, for he suffered with rheumatism.

3 He was just about to roll it up carefully when he noticed, standing in the doorway watching him, Monsieur Malandain, the harness maker, with whom he had formerly had a dispute over a harness. Hauchecorne felt a sort of shame at being seen thus by his enemy, fumbling in the mud for a bit of string. He hurriedly concealed his treasure; then he pretended to look on the ground for something else, which he did not find; and finally he went on toward the market, his head thrust forward, bent double by his pains.

4 He lost himself at once in the slow-moving, shouting crowd, kept in a state of continuous excitement by the interminable bargaining. The peasants felt of the cows, went away, returned, sorely perplexed, always afraid of being cheated.

5 The women listened to offers for their fowls, adhered to their prices, short of speech and impassive of face; or else, suddenly deciding to accept the lower price offered, they would call out to the customer as he walked slowly away: "All right, Mast' Anthime. You can have it."

6 Then, little by little, at the approach of

From "The Piece of String" by Guy de Maupassant.
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midday, the square became empty as the peasants and customers betook themselves to the various inns for their meal.

7 At Jourdain's the common room was full of customers feasting on chickens, pigeons, and legs of mutton. Suddenly a drum rolled in the yard, and in an instant everybody was on his feet, save a few indifferent ones; and they all ran to the door and windows.

8 Having finished his long tattoo, the public crier shouted in a jerky voice, making his pauses in the wrong places:

9 "The people of Goderville, and all those present at the market are informed that between —nine and ten o'clock this morning on the Beuzeville–road, a black leather wallet was lost, containing five hundred–francs, and business papers. The finder is requested to carry it to— the mayor's office at once, or to Master Fortune Houlbrèque of Manneville. A reward of twenty francs will be paid." Then he went away, leaving the diners to discuss the incident, reckoning Master Houlbrèque's chance of recovering his wallet. They were finishing their coffee when the corporal of gendarmes appeared in the doorway and inquired for Master Hauchecorne of Bréauté, instructing him to appear at the mayor's office.

10 The peasant, surprised and disturbed, drank his *petit verre* at one swallow, rose, and started off, repeating: "Here I am, here I am."

11 The mayor was waiting for them seated in an armchair, pompous, stout, and solemn-faced. "Master Hauchecorne," he said, "you were seen this morning, on the Beuzeville road, picking up the wallet lost by Master Houlbrèque of Manneville."

12 The rustic, dumbfounded, stared at the mayor, already alarmed by this suspicion which had fallen upon him, although he failed to understand it. He denied the accusation, upon which the mayor informed him that his action had been witnessed by Monsieur Malandain, the harness maker.

13 Then the old man remembered and understood; and flushing with anger, he cried:

14 "Ah! he saw me, did he, that sneak? He saw me pick up this string, look m'sieu' mayor."

15 And fumbling in the depths of his pocket, he produced the little piece of cord.

16 But the mayor was incredulous and shook his head. "You won't make me believe, Master Hauchecorne, that Monsieur Malandain, who is a man deserving of credit, mistook this string for a wallet."

17 "It's God's own truth, the sacred truth, all the same, m'sieu' mayor. I say it again, by my soul and my salvation."

18 "After picking it up," rejoined the mayor, "you hunted a long while in the mud, to see if some piece of money hadn't fallen out."

19 The good man was overcome by wrath and fear.

20 "If anyone can tell—if anyone can tell lies like that, to ruin an honest man! If anyone can say—"

21 To no purpose did he protest; he was not believed, but confronted with Monsieur Malandain, who repeated and maintained his declaration. They insulted each other for a whole hour, during which, at his own request, Master Hauchecorne was searched. They found nothing on him. The mayor, perplexed, discharged him but warned that he proposed to inform the prosecuting attorney's office and to ask for orders.

22 The news had spread. On leaving the mayor's office, the old man was surrounded and questioned with serious or bantering curiosity. When he began to tell the story of the string, they laughed at him.

23 He went his way, stopping his acquaintances, repeating again and again his story and his protestations, showing his pockets turned inside out, to prove that he had nothing.

24 They said to him: "You old rogue, *va*!"

25 And he lashed himself into a rage, feverish with excitement, desperate because he was not believed, at a loss what to do, and still telling his story until night fell.

26 He was ill over it at night.

27 The next afternoon, about one o'clock, a farm hand employed by a farmer of Ymauville surrendered the wallet and its contents. He claimed that he had found it on the road; but, being unable to read the name, he had carried it home and given it to his employer. When the news reached Master Hauchecorne he started out triumphant to tell his story again. He noticed, however, that people seemed to laugh while they listened to him—they did not seem

convinced. He felt as if remarks were made behind his back.

28 And then, on Tuesday of the next week, he went to market at Goderville, impelled solely by the longing to tell his story and have someone believe him. He accosted a farmer from Criquetot, who did not let him finish, but poked him in the pit of his stomach, and shouted in his face: "Go on, you old fox!" Then he turned on his heel.

29 When he was seated at the table in Jourdain's Inn, he was interrupted by a horse trader from Montvilliers:

30 "Nonsense, nonsense, you old dodger! I know all about your string!"

31 "But they've found the wallet!" faltered Hauchecorne.

32 "None of that, old boy; there's one who finds it, and there's one who carries it back. I don't know just how you did it, but I understand you."

33 The peasant was fairly stunned; he understood at last. He was accused of having sent the wallet back by a confederate, an accomplice. He returned home, shamefaced and indignant, suffocated by wrath, by confusion, and all the more cast down because, with his Norman cunning, he was quite capable of doing the thing with which he was charged, and even of boasting of it as a shrewd trick. His innocence was impossible to establish, his craftiness being so well known. And he was cut to the heart by the injustice of the suspicion.

34 He made the story longer, added new arguments, and made more solemn oaths, but the more complicated his defense the less he was believed. He exhausted himself in vain efforts; he grew perceptibly thinner and, in late December, took to his bed.

35 In January he died, in the delirium of his death agony still protesting his innocence, repeating, "A little piece of string—a little piece of string—see, here it is, m'sieu' mayor."

HOW WELL DID YOU READ?

Did you get the important points?

1. **The whole problem could have been avoided if Hauchecorne had**
   - **A** immediately insisted on being searched
   - **B** not insulted Malandain
   - **C** left the string alone
2. **Even after the wallet was found, people suspected Master Hauchecorne because**
   - **A** he had a reputation for slyness
   - **B** Malandain spread a rumor
   - **C** he was poor and needed the money
3. **Hauchecorne's death was brought about by**
   - **A** rheumatism
   - **B** frustration
   - **C** remorse
4. **This is a story of a man who is**
   - **A** defeated by his own reputation
   - **B** treated unfairly by his townspeople
   - **C** victimized by another man

What is the author's purpose?

5. **The author mentions Hauchecorne's rheumatism in order to show**
   - **A** more clearly what he looked like
   - **B** how his greed overcame his pain
   - **C** why he was always bending over
6. **The author classes Hauchecorne's desire to save the string as**
   - **A** a normal one under the circumstances
   - **B** evidence of his grasping character
   - **C** a sign that he was getting childish

What is the point of view?

7. **The author describes the feelings of**
   - **A** all the characters
   - **B** Hauchecorne alone
   - **C** Hauchecorne and Malandain

Do you understand the motivation?

8. **Most damaging to Hauchecorne was the knowledge that he**
   - **A** could convince no one of his innocence
   - **B** would see Malandain come out on top
   - **C** could have done what he was accused of

9. Malandain went to the police because he

A would even lie to hurt Hauchecorne

B honestly believed Hauchecorne had taken the wallet

C had been told that Hauchecorne and the farm hand were both involved in the crime

10. The real villain of the story was

A coincidence

B the actual thief

C Hauchecorne's character

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. small leftover piece *(2)*
2. endless *(4)*
3. stuck fast *(5)*
4. showing no emotion *(5)*
5. simple country fellow *(12)*
6. brought face to face *(21)*
7. puzzled *(21)*
8. teasing *(22)*
9. said hesitantly *(31)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. true *(2)*

A correct; accurate

B rightful; lawful

C genuine; characteristic

11. stout *(11)*

A courageous

B fat

C strong

12. produced *(15)*

A showed

B led to

C brought into existence

13. rejoined *(18)*

A said in answer

B reunited

C came back into a group

14. discharged *(21)*

A unloaded

B sent away

C removed

C. Often you have a key to the meaning of an unfamiliar word if you are able to recognize the **root** word on which it is built.

Directions: Each pair of words in column I is built on one root. Decide what the root is, and find its meaning in column II. Write the meaning.

I	II
15. divorce, vortex	bend
16. flexible, deflect	kind; race
17. vitamin, vital	self; I
18. cavalcade, cavalry	turn
19. general, genus	hang
20. audition, audience	life
21. egomania, egoism	hear
22. pending, pendulous	horse

D. Synonyms are words that have the same or nearly the same meaning. **Antonyms** are words that have opposite or nearly opposite meanings.

Directions: Look at each pair of words below. Decide whether they are synonyms, antonyms, or neither. If they are synonyms, write **S**; if they are antonyms, write **A**; if they are neither, write **N**.

23. fumbling — delighted

24. concealed — hid

25. callous — insensitive

26. incident — happening

27. reckoning — figuring

28. disturbed — serene

29. pompous — humble

30. incredulous — believing

31. wrath — goodwill

32. unsatisfied — gratified

33. perceptibly — visibly

9

WOMEN IN SPACE— AND THE WOMEN WHO HELP THEM FLY

by Lisa Yount

UPI/Bettmann Newsphotos

Sally Ride at Kennedy Space Center, 1983

1 When Sally Ride flew in the space shuttle in June, 1983, her face appeared in newspapers and on television screens across the world—and no wonder. She was the first American woman, and only the second woman in the world, to penetrate space. (Soviet Union cosmonaut Valentina Tereshkova had gone into orbit in 1963.) But Sally wasn't the first woman to be involved in the United States space program—not by a moon shot.

2 The definition of the "right stuff" for an astronaut has changed in some ways since the early days of the space program, making it possible for a wider variety of people, including women, to go into space.

3 Astronauts no longer need to be experienced test pilots, for example. Today many astronauts, such as Sally, a physicist and an astronomer, acting as "mission specialists," are scientists rather than pilots. Mission specialists perform experiments aboard the shuttle and assist with other tasks such as launching satellites. The first women in the astronaut program were all mission specialists.

4 Some things about being an astronaut haven't changed, though. Astronauts must still be physically fit, which was easy for Sally, a former tennis champion who had always enjoyed sports. Astronauts must remain calm under pressure, and being tranquil during stress was another trait Sally had acquired from her tennis matches.

5 Five other women joined the astronaut training program at the same time Sally did, in July, 1978, and additional ones have been assigned since then. These women astronauts are experts in a variety of fields. Anna Fisher, for example, is a specialist in emergency medicine, and Kathryn Sullivan is a geologist.

6 An important part of astronaut training involves learning "ground jobs" at Johnson Space Center in Houston or Kennedy Space Center at Cape Canaveral, Florida. For a while Sally Ride worked as the capsule communicator, or "cap-

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com," for several space shuttle flights. The cap-com is the only person who talks directly to the shuttle crew during a flight. Working from Mission Control in Houston, the cap-com relays instructions and information between ground control and the astronauts. When she was cap-com, Sally's steady, cool voice became familiar to millions of listeners as the shuttle flights were shown on television. Her demeanor also impressed fellow astronaut Robert Crippen, who was later the commander of Sally's shuttle flight.

7 During her training, Sally met many other people who worked for the National Aeronautics and Space Administration (NASA), the government agency in charge of the space program. Sally and the other astronauts were fully aware that their flights could never materialize without the more mundane efforts of the thousands of workers who remain on the ground.

8 Today, many of those workers are women, but when Sally Ride began her training, women were still a somewhat unusual sight at the Johnson and Kennedy centers, although this is no longer true. Both the number and the stature of women in the space program have increased in recent years.

9 Most men at the space centers have adjusted well to working with women. Although blatant discrimination against women was never common, some problems did occur when the women were newcomers.

10 Systems engineer Astrid Heard remembers such a problem with an older male co-worker and how she handled his rancor. "I just kept doing my job," she recalls. Her answer is typical of the professional attitude of women employed in the space program.

11 Women in the space program, whether astronauts or workers on the ground, tend to have certain things in common. Most of them were superior students, especially in mathematics, and most were good at sports, too. Often they were fascinated with flying, in the air or in space or both, from early childhood and eventually earned pilot's licenses.

12 JoAnn Morgan is one who was attracted to space when she was young. As a teenager, she stayed up all night to watch the launch of America's first space satellite in 1958. Later she became an engineer in the computer services division of the Kennedy Space Center, still fascinated by the missiles and space vehicles that computers help to leave the ground. Kathryn Clinton, another engineer at the space center, was the first black woman to hold such a job.

13 These days, many women in the space program start their careers young, but none started younger than Jackie Parker, who became a flight controller at Johnson Space Center in 1979. She was only eighteen at the time and had already graduated from college the year before. At the space center, Jackie was given the crucial job of monitoring the space shuttle's five onboard computers during the shuttle's launch.

14 Kathleen Weaver scored a "first" of a different kind as the first woman paramedic and fire fighter to be hired at Kennedy Space Center. Later another woman, Melany Baskin, was also hired for this position.

15 Most of the time, Kathleen and Melany stand ready to help during fires or other accidents at the center, but they have also been trained in special rescue techniques to save astronauts' lives.

16 Sally Ride may not have met some of the women who are part of the space program, because those women do not work at the space centers. One of them, Irene Long, Sally may meet someday. Irene, a doctor, was taking special training in aerospace medicine sponsored partly by NASA at about the same time Sally was preparing to become an astronaut.

17 Irene was the only black and the only woman doctor in the civilian aerospace program at that time. She didn't spend much time thinking about being unusual, but instead looked forward to the future, when work such as hers would be common. "I'd like to live on a colony on the moon and have a little hospital there," she said.

18 Eilene Galloway may never have met Sally Ride, either, yet her work has had profound effects on the tasks Sally and all the other astronauts perform in space. When nearly eighty years old, Eilene finally decided to retire from a long career as an expert in space law. Her advice has shaped NASA's plans and United States government treaties with other nations concerning space. She has tried to help governments see "the broad picture" and cooperate in exploring and developing space in a peaceful way.

19 Some women who do not work for NASA at all have also played key roles in America's space

ventures. One is Linda Morabito, an engineer with the Jet Propulsion Laboratory in Pasadena, California, and a member of a team studying photographs taken by the space probe *Voyager*. She followed the probe's trajectory by studying background stars in the photographs.

20 One day in March, 1979, soon after *Voyager* passed the planet Jupiter, Linda noticed in a photograph taken by the probe a strange plume rising from the surface of Io, one of Jupiter's moons. The plume turned out to be gas from an erupting volcano—the first ever to be discovered outside of planet Earth!

21 Being an astronaut is still more glamorous than any other space job, of course, but also carries the greatest risk. Two women died when the spacecraft *Challenger* exploded in January, 1986. They were astronaut Judith Resnick and New Hampshire high school teacher Christa McAuliffe, who was to have been the first "ordinary person" to make a foray into space. But the women who go into space accept this risk just as the men do, realizing that the pioneers of the space age must face danger just as did the pioneers who settled our country. Courage as well as a spirit of adventure is characteristic of all the women on the ground and in the air who keep our space program reaching for the stars.

HOW WELL DID YOU READ?

Do you remember the facts?

1. **The country's main space centers are in**
   - **A** California and Washington, D.C.
   - **B** Illinois and New York
   - **C** Texas and Florida

2. **The agency in charge of our space program is**
   - **A** NATO
   - **B** NASA
   - **C** SEATO

Did you get the point?

3. **Today, women workers at the space centers are**
   - **A** common and usually well accepted
   - **B** primarily computer systems engineers
   - **C** few but highly placed and well paid

4. **Women who do important work in the space program**
   - **A** are all trained in mathematics and physics
   - **B** must be employees of NASA or the U.S. government
   - **C** have varying interests and educational backgrounds

5. **Which of these persons would probably make the poorest astronaut?**
   - **A** A former research physician turned professional archer
   - **B** A physics professor who rides a bicycle daily
   - **C** A business executive who has won the Boston Marathon

6. **A capsule communicator**
   - **A** functions as the shuttle crew's "lifeline" to Earth
   - **B** is the most important "ground" job at NASA
   - **C** both **A** and **B**

7. **Women who go into space probably think of themselves as**
   - **A** heroes
   - **B** pioneers
   - **C** ordinary workers

Can you draw the right conclusions?

8. **One of the times Sally Ride most needed her ability to be cool under pressure was probably when she**
   - **A** talked to reporters after her flight
   - **B** reported for training to be an astronaut
   - **C** met other workers at the space centers

9. **NASA-trained women astronauts who go into space in the future will probably receive**
   - **A** just as much publicity as Sally Ride
   - **B** less publicity than Sally Ride
   - **C** no publicity at all

10. **Ten or twenty years from now, an article about the space program will probably be**
    - **A** necessary to encourage women to enter it
    - **B** censored to protect the security of space workers
    - **C** unconcerned about the gender of astronauts

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. appearance and behavior *(6)*
2. ordinary *(7)*
3. position or rank gained by achievement *(8)*
4. extremely obvious *(9)*
5. resentment *(10)*
6. one who does some of the work of a doctor *(14)*
7. involving the atmosphere and space *(16)*
8. course or path *(19)*
9. brief expedition *(21)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. shot *(1)*
- **A** the launching of a spacecraft
- **B** a medical injection
- **C** the directed firing of a weapon

11. mission *(3)*
- **A** a church set up to attract converts
- **B** an official group sent to a foreign country
- **C** an assigned task or operation

12. fields *(5)*
- **A** areas or subjects of activity
- **B** open land areas
- **C** areas where battles are fought

13. impressed *(6)*
- **A** produced a strong effect on
- **B** made a mark by pressure
- **C** took by force for military service

14. adjusted *(9)*
- **A** regulated
- **B** adapted
- **C** rectified

C. The **suffixes** *-ate* and *-ive* both mean "of the nature of" or "relating to." The suffix *-ate* is usually used to form adjectives from nouns. The suffix *-ive* is usually used to form adjectives from verbs.

Directions: Decide which suffix should be added to each word below to form an adjective. Write the adjective.

15. attract
16. proportion
17. oppress
18. create
19. palm
20. impulse
21. college
22. fortune

D. Figures of speech are used to make language richer and more vivid. **Personification** is a figure of speech in which a thing, quality, or idea is treated as if it were a person: "Oh gentle sleep! Nature's soft nurse . . ." is a personification because sleep is treated as if it were a person—a nurse. "There stands Jackson, like a stone wall" is not a personification, because Jackson is regarded as if he were a thing—a stone wall.

Directions: Read each quotation below. If it is a personification, write **P**; if it is not a personification, write **N**.

23. "I am as vigilant as a cat to steal cream."

24. "Nature, with equal mind, sees all her sons at play."

25. "He wears the rose of youth."

26. "And on his grave, with shining eyes
The Syrian stars look down."

27. "Spring is come home with her world-wandering feet."

28. "The steep and thorny way to heaven . . ."

29. "The ever-whirling wheel of change . . ."

30. "Wise poets that wrap truth in tales
Know her themselves through all her veils."

31. "Philosophy [is] the lumber of the schools."

32. "Tea, although an Oriental, is a gentleman at least;
Cocoa is a cad and coward; cocoa is a vulgar beast."

33. "I am, out of the ladies' company, like a fish out of water."

10

THE REAL SHERLOCK HOLMES

by Vincent Starrett

1 The English detective Sherlock Holmes died with his creator, Arthur Conan Doyle, on July 7, 1930, at Conan Doyle's home in Sussex. But to his legion of readers and admirers the most famous sleuth of all detective fiction is still very much alive.

2 It is probably true, as many believe, that Holmes was modeled after Dr. Joseph Bell of Edinburgh, but there is also no doubt that in a very real sense Holmes was Sir Arthur Conan Doyle himself. Throughout Conan Doyle's extraordinary, many-sided life—as student, physician, writer, and spiritualist—he always remained the private detective, the hound of truth on the trail of injustice and official apathy.

3 Twice in his career Conan Doyle undertook laborious investigations because he believed that justice had not been done. There is a flavor of Sherlock Holmes in both episodes—that pinch of the bizarre that marks most of the fictional detective's adventures. The cases of George Edalji and Oscar Slater were notorious in their day. They shook all England, and the thunder of Conan Doyle's denunciations crossed the Atlantic.

4 George Edalji, a young law student, had been tried and imprisoned for the crime of horse maiming. Sir Arthur, on hearing of the case some time later, was convinced that Edalji was not guilty, and immediately went to work to ascertain the truth.

5 The defense of Edalji had been weakly put forth. As far as Conan Doyle was able to find, no mention had been made of the fact that the prisoner was almost blind—a significant fact, since between his home and the scene of the crime there stretched a complex expanse of rails, wires, and other obstacles. The prisoner, severely handicapped by his poor sight even in broad daylight, was accused of having crossed this maze to the scene of the crime at night, not just once, but repeatedly. After a long and tiring battle, resulting in the establishment of an official government investigating committee, Conan Doyle

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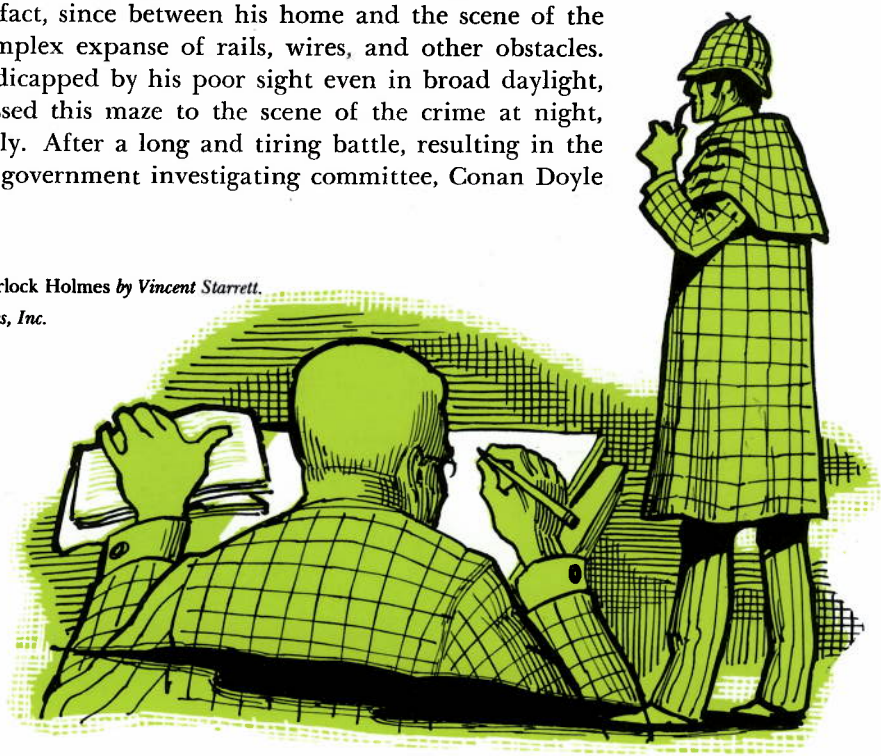


finally succeeded in securing Edalji's freedom.

6 Sir Arthur's success in this case led to a request that he enter the notorious Slater case. An elderly spinster had been murdered, and Slater, a German immigrant, was arrested for the crime after he had pawned a diamond brooch similar to the one missing from the dead woman's flat. Although it was shown that the brooches were not identical, and although Slater produced a clear alibi, he was held for the crime. Already found guilty in the newspapers and by aroused public opinion, Slater had been tried for the murder and convicted. Two days before the scheduled execution his sentence had been commuted to life imprisonment.

7 Conan Doyle investigated the case and produced a brilliant pamphlet in which he reexamined the evidence presented at the trial. Many years later, as a result of Conan Doyle's dogged work, Slater received a new trial and was acquitted.

8 Minor mysteries, too, were frequently brought to Sir Arthur's attention. One involved a man who had mysteriously disappeared after withdrawing his entire bank balance of forty pounds from a London bank. It was feared that he had been robbed and slain. The supposed victim had come up to London in the morning and registered at a hotel. In the evening he had attended a performance at the theater, after which he had returned to his hotel, discarded his evening garments, and changed into street clothes. The dress suit was discovered in his hotel room the next morning.

9 No one actually saw the missing man leave the hotel, but an occupant of a neighboring room remembered hearing someone moving about during the night. A week passed before Conan Doyle was brought into the case, and the police had discovered exactly nothing. The baffling aspects of the mystery would have provided a perfect opening for an adventure of Sherlock Holmes.

10 The facts were communicated by relatives of the missing man living in the country, and Sir Arthur answered by return post that, obviously, the vanished citizen was either in Glasgow or Edinburgh. It was later proved that the man had gone to Edinburgh. You can almost hear the admiring Watson congratulating Holmes on his shrewd conclusion, and Holmes's depreciating retort, "Elementary, my dear Watson, elementary!"

11 Sir Arthur later explained how he had solved the problem in his autobiography, *Memories and Adventures:*

12 "The one advantage I possessed was that I was familiar with the routine of London hotels. The first thing was to look at the facts and separate what was certain from what was conjecture. It was all certain except the statement of the person who heard the missing man in the night. How could he tell such a sound from any other sound in a large hotel? The point could be disregarded if it contradicted the general conclusions. The first deduction was that the man had meant to disappear. Why else should he draw all his money? He had got out of the hotel during the night. But there is a night porter in all hotels, and it is impossible to get out without his knowledge when the door is once shut. The door is shut after the theatergoers return—say at twelve o'clock. He had come from the music hall at ten, had changed his clothes, and had departed with his bag. Since no one had seen him leave, the inference is that he did so at the moment when the hall was full of returning guests, which is from eleven to eleven thirty. After that hour, even if the doors were still open, there are few people coming and going, so that he with his bag would certainly have been seen.

13 "Having got so far upon firm ground, we now ask ourselves why a man who desires to hide himself should go out at such an hour. If he intended to conceal himself in London, he need never have gone to the hotel at all; clearly, then, he was going to catch a train which would carry him away. But a man who is deposited by a train in any provincial station during the night is likely to be noticed, and he might be sure that when the alarm was raised and his description given, some guard or porter would remember him. Therefore his destination would be some large town which he would reach as a terminus where all his fellow passengers would disembark and where

he would lose himself in the crowd. When one checks the timetable and sees that the great Scotch expresses bound for Edinburgh and Glasgow start about midnight, the goal is reached. As for his dress suit, the fact that he abandoned it proved that he intended to adopt a line of life where there were no social amenities. This deduction also proved to be correct."

14 In another of Conan Doyle's cases, one involving a young woman engaged to be married to a foreigner, the man also disappeared. By a process of reasoning similar to that displayed in his solution of the Edinburgh case, Conan Doyle was able to show where the missing foreigner had gone—and how unworthy he was of his fiancée's affection.

15 Not all the novelist's detective cases, however, were as successful as these. Sir Arthur relates with great gusto the story of a burglary within a stone's throw of his own house. The local constable, unencumbered with theories, had already seized the culprit by the time Sir Arthur had come to the conclusion that the man was left-handed and had nails in his shoes.

16 Even in his spiritualist investigations, which filled the last years of his life, Conan Doyle remained the detective, applying logical reasoning to the obscure problems of psychic phenomena. To the end he combined the traits of a scientific investigator with the curiosity of a child—a most successful blend, it would seem, for the perfect sleuth.

HOW WELL DID YOU READ?

Can you draw the right inferences?

1. **There is evidence in the story that**
   - **A** Conan Doyle had been a professional sleuth
   - **B** Conan Doyle relived his personal experiences through his stories
   - **C** Conan Doyle resembled Sherlock Holmes

2. **Conan Doyle's reaction to his failure in the burglary case showed that he**
   - **A** was essentially a modest man
   - **B** had a sense of humor
   - **C** could be childish at times

Can you see the similarity?

3. **Detective work and spiritualism are similar in that both**
   - **A** are based on logical thinking
   - **B** contain an element of mystery
   - **C** appeal to a scientific mind

Did you notice the details?

4. **Conan Doyle's part in the Edalji case was to**
   - **A** find the true murderer and expose him
   - **B** demonstrate that Edalji was almost blind
   - **C** prove it was impossible for Edalji to have committed the crime

5. **One element in the story of the missing man that Conan Doyle disregarded was the**
   - **A** withdrawal of all the man's money from the bank
   - **B** hour at which the man returned to his room
   - **C** noise overheard from his room

6. **Conan Doyle's method for locating the missing man was to**
   - **A** put together all known facts, then figure out logical explanations for the unknown ones
   - **B** search carefully for clues, then follow the trail of the clues
   - **C** question everyone who could possibly have been involved, thus revealing unknown facts

7. **The most important clue in the case of the missing man was the**
   - **A** dress suit found in his room
   - **B** hour at which he left the hotel
   - **C** description given by the porter

Can you draw the right conclusions?

8. **As a result of Conan Doyle's investigations in the infamous case involving the German immigrant Slater, Slater**
   - **A** was immediately given a full pardon by the government and freed
   - **B** was, after many years, given a new trial and acquitted
   - **C** was tried for murder and convicted

9. Slater's conviction was an example of

A the work of a fair but poorly informed court

B public opinion influencing a court decision

C the danger of having no alibi

10. Most of Conan Doyle's detective work was

A done at the request of the authorities

B part of his constant search for material for his writing

C the result of his love of truth and justice

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. one who believes in communication with the spirits of the dead *(2)*
2. indifference *(2)*
3. verbal attacks *(3)*
4. find out *(4)*
5. made less severe *(6)*
6. making light of *(10)*
7. guesswork *(12)*
8. courteous acts *(13)*
9. unhindered *(15)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. pinch *(3)*

A squeeze

B emergency

C small amount

11. put forth *(5)*

A presented

B published

C extended

12. produced *(6)*

A caused

B manufactured

C offered

13. certain *(12)*

A established as fact

B sure in mind

C inevitable

14. obscure *(16)*

A gloomy

B faintly masked

C little-known; vague

C. The **prefix** *dis-* means "apart" or "opposite of."

Directions: Decide the meaning of *dis-* in each word below. Write *apart* or *opposite of.*

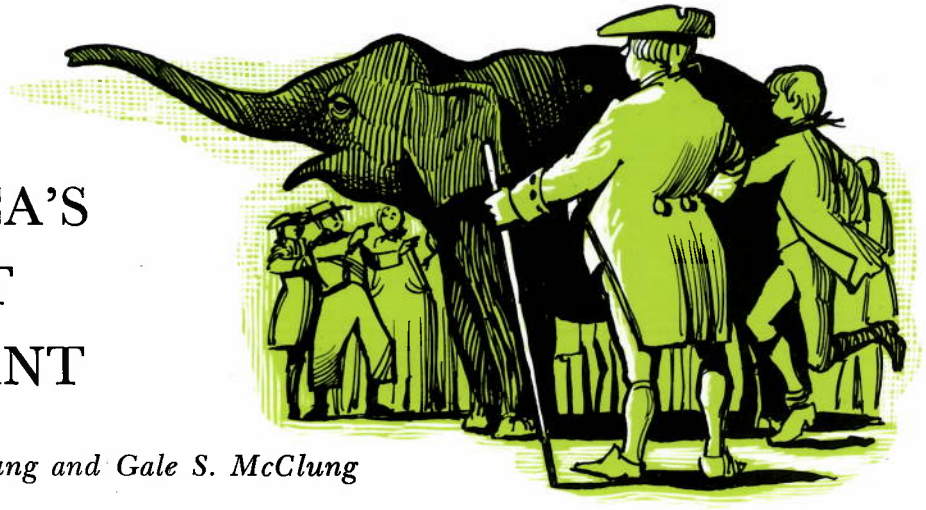
15. disperse
16. disrupt
17. distinguish
18. dispel
19. displeasing
20. disagree
21. discern
22. dissatisfied

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says. "They had a heart-to-heart talk" does not mean that their hearts conversed with each other. It means that they had a candid, frank discussion.

Directions: The idioms in column II are built on the word *heart.* Write the idiom that best fits each meaning in column I.

I	II
23. from memory	break one's heart
24. decide that one wants	change of heart
25. as much as one desires	have a heart
26. new attitude	set one's heart on
27. cause great grief or disappointment	by heart
28. be kind, sympathetic, or merciful	to one's heart's content
29. afraid; nervous	eat one's heart out
30. unwillingly	near one's heart
31. be overcome with grief; pine away	with half a heart
32. dear to one	from the heart
33. sincerely	heart in mouth

11



AMERICA'S FIRST ELEPHANT

by Robert M. McClung and Gale S. McClung

1 Reverend William Bentley hurried through the busy downtown streets of Salem, Massachusetts. The year was 1797, and Salem was at the height of her glory, one of the new nation's busiest ports. Tattooed sailors scurried back and forth, creaking wagons lumbered by, gulls fluttered over a forest of masts and sails. Ordinarily the sights and sounds of the picturesque city fascinated the bustling, friendly pastor, but not today. His thoughts were upon the Market Place and the great curiosity he was about to see there. Mr. Bentley, an avid naturalist, was on his way to see the first elephant ever exhibited in the New World.

2 When he reached the Market Place, he wormed his way through a gathering of jocular seamen, long-frocked merchants, and wide-eyed boys to gaze long and carefully at the curious beast, the center of attention. Though he didn't mention it to the others, Mr. Bentley knew from his reading that it was only a small elephant as elephants go—hardly over six feet—but his curiosity about the animal soon overwhelmed any disappointment.

3 As the pastor and the others looked on, the elephant's keeper tried time after time to mount the pachyderm's back, only to be thrown off again. But the keeper assured the spectators that the elephant was perfectly tame and was even accustomed to walking loose from city to city; in spite of this, he cautioned them not to come too close with money or valuables in their hands, for the beast had been known to snatch and eat such tidbits.

4 The elephant had been brought to America the year before by an enterprising sea captain. The *New York Argus* for Monday, the eighteenth of April, 1796, had carried the notice of the elephant's arrival in a short but intriguing news item.

5 "The *America* has brought home an elephant from Bengal in perfect health. It is a female, two years old, and of the species that grow to an enormous size. This animal was sold for $10,000, being supposed to be the greatest price ever given for an animal in Europe or America."

6 Captain Jacob Crowninshield, a native of Salem and the enterprising captain of the *America,* had purchased the elephant in India for $450, as a personal "adventure" or investment. When he returned to his native country, he had obviously not had any trouble disposing of his prize. True Yankee trader that he was, Crowninshield had realized a profit of $9550 on his original investment!

Based on "America's First Elephant" by Robert M. and Gale S. McClung.
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7 The new owner, who chose to remain anonymous, began at once to exhibit the elephant in a building at Broadway and Beaver streets in New York. This was a choice location right in the center of the business district.

8 Every day curious crowds flocked to see the elephant, as its owner trumpeted the virtues of the remarkable beast in newspaper advertising. "To the Curious. The Elephant from Bengal, lately arrived on the ship *America* and purchased at the expense of Ten Thousand Dollars. This most surprising animal, the first that was ever brought to this country, is remarkable for its sagacity, its courage in war, and its attachment to its keeper. It is six feet and one half high, about two years old, eats thirty pounds of rice besides hay and straw, drinks all kinds of wine and spirituous liquors, and eats every sort of vegetable; it will also draw a cork from a bottle with its trunk . . ."

9 The crowds especially enjoyed watching the elephant stowing away food, using her trunk not only as knife, fork, and spoon, but as a container for liquids as well. Visitors offered her all sorts of things, some edible and some not, just to watch that wonderful trunk in action. The elephant was by far the greatest animal attraction in town, and its owner found it worth his while to stay in New York a month longer than he had originally intended.

10 On June 22 the elephant and its master finally left town, heading south toward Philadelphia. In easy stages the elephant ambled through the pleasant New Jersey countryside, stopping frequently for exhibition purposes. In spite of all precautions, the elephant sometimes met with an unexpected stagecoach or wagon, and there were undoubtedly some exciting moments when skittish horses reared in fright, or bolted at the sight and smell of this strange creature with tremendous flapping ears and dangling trunk.

11 From Philadelphia elephant and master proceeded to Baltimore, where they remained for a month. They then returned to Philadelphia to pass the winter.

12 There was at that time a strong and bitter rivalry between the two theaters in the city. Hearing of the elephant's presence, the manager of the New Theater was inspired. He engaged

the English actor Thomas Cooper, who was just at the threshold of his career as a famous tragedian, and arranged to star him in the popular old tragedy *Alexander the Great, or The Rival Queens.* Then in order to make doubly sure that he would have a full house on opening night, he engaged the elephant to play the part in the play usually filled by a mechanical beast. The first and only live elephant in America should bring in the crowds!

13 On opening night the cream of the capital city's society made its way to the theater boxes—the men strutting like peacocks in their tight-fitting breeches and swallowtail coats; the women resplendent in gowns cut in the latest continental styles. With the "common" people crowded into the galleries and the pit, the theater was jam-packed as the curtain went up on the triumphant entry of Alexander into Babylon.

14 Trumpets flourished, gay ensigns waved, and turbaned slaves trembled. With a blare of martial music, Alexander and the elephant made their entry in regal splendor.

15 Nothing has been recorded about the acting ability of America's first elephant, but the crowd could not have been more enthusiastic. Neither Mr. Cooper's between-act prologs nor the play itself appealed to the audience as did the elephant. And the elephant's owner, who received sixty dollars for that one-night stand, ever afterward used the stage appearance as publicity material.

16 The day after its theatrical debut, the elephant headed north again for a second visit to New York. From there she was started on an extensive tour of New England. In August she arrived in Salem, and it was then that the Reverend Bentley had his first opportunity to see

the curious beast. The elephant stayed in Salem for a week and then went to Marblehead, Beverly, and Newburyport, returning to Boston for the winter.

17 At Christmastime the good Bostonians prepared a Christmas pudding for the elephant. It consisted of seventy-five pounds of rice, twenty-five pounds of raisins, fourteen pounds of molasses and a half pound of cayenne pepper. After eating this concoction, the unfortunate creature became violently ill, but she recovered. In the spring she headed south again, and by winter she had arrived in Charleston, South Carolina. After the gay Christmas and holiday season in Charleston, the elephant and her keeper proceeded south to Savannah. Late in March 1799 the elephant reached Savannah and was exhibited there for nearly two weeks. After that stay in Savannah, however, America's first elephant disappears entirely from the records. It is possible that she died about this time in some out-of-the-way spot. In any event, she vanished without a trace, for no other Southern cities profess to have seen an elephant during those early years.

18 Regardless of what finally happened to the Crowninshield elephant, she was the first elephant in history to visit America. As such, she afforded countless thousands of solid citizens their first and only sight of an elephant—a remarkable experience they would never forget.

HOW WELL DID YOU READ?

What is the authors' purpose?

1. **This story could best be characterized as**
   - **A** the story of a historical curiosity
   - **B** a humorous description of an event
   - **C** a section taken from a history of New England from 1781 to 1812

How careful was your reading?

2. **The elephant was brought to America to**
   - **A** be used in the Salem zoo
   - **B** be exhibited for a profit
   - **C** satisfy the curiosity of naturalists like Mr. Bentley

3. **The elephant was shown in America for**
   - **A** about three years
   - **B** several months
   - **C** an unspecified period of time

4. **The animal's theatrical career lasted**
   - **A** one night
   - **B** through the winter
   - **C** several years

5. **The elephant's death was brought on by**
   - **A** eating bad food
   - **B** New England's cold climate
   - **C** some unknown cause

What do the authors say?

6. **Most fascinating to crowds was the elephant's**
   - **A** size
   - **B** trunk
   - **C** ability to follow instructions

7. **The exhibitor of the elephant was**
   - **A** some unnamed person
   - **B** Captain Crowninshield
   - **C** Mr. Bentley

8. **The animal moved from place to place by**
   - **A** train
   - **B** walking
   - **C** some conveyance not described in the story

Can you make the right inferences?

9. **Mr. Bentley first saw the elephant**
   - **A** when she landed in America
   - **B** after she had been in America about a year
   - **C** shortly before she died

10. **The authors gathered the information for this story by**
    - **A** scanning old letters
    - **B** going through history books dealing with the period
    - **C** reading old newspapers

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. keen; eager *(1)*
2. merry; in a joking mood *(2)*
3. fascinating *(4)*
4. proclaimed loudly *(8)*
5. shrewdness; intelligence *(8)*
6. moved at an easy pace *(10)*
7. easily frightened *(10)*
8. gorgeous *(13)*
9. first appearance *(16)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

10. notice *(4)*
    - **A** act of observing
    - **B** respectful treatment
    - **C** announcement

11. choice *(7)*
    - **A** dainty
    - **B** excellent
    - **C** precious

12. ensigns *(14)*
    - **A** flags
    - **B** naval officers
    - **C** flag carriers

13. stand *(15)*
    - **A** small table on which things are placed
    - **B** performance
    - **C** position

14. afforded *(18)*
    - **A** furnished
    - **B** yielded
    - **C** met the cost of

C. The **suffixes** *-archy* and *-cracy* both mean "rule by" or "rule of." Usually only one of these suffixes can be used with a specific word.

Directions: Decide which suffix goes with each word part below. Add the suffix and write the word.

15. demo_____
16. matri_____
17. mon_____
18. patri_____
19. aristo_____
20. auto_____
21. an_____
22. bureau_____

D. Figures of speech are used to make language richer and more vivid. **Personification** is a figure of speech in which a thing, quality, or idea is treated as a person: "Oh gentle sleep! Nature's soft nurse . . ." is a personification because sleep is treated as if it were a person—a nurse. "There stands Jackson, like a stone wall" is not a personification, because Jackson is regarded as if he were a thing—a stone wall.

Directions: Read each quotation below. If it is a personification, write **P**; if it is not a personification, write **N**.

23. "The river looked at him with a thousand eyes."
24. "He was but as the cuckoo is in June, heard, but not regarded."
25. "Our Garrick's a salad, for in him we see Oil, vinegar, sugar, and saltness agree."
26. "I shall be but a shrimp of an author."
27. "Laughter, holding both his sides . . ."
28. "A nickname is the heaviest stone that the devil can throw at a man."
29. "Busy old fool, unruly Sun,
    Why dost thou thus,
    Through windows, and through curtains, call on us?"
30. "Night with her train of stars, and her great gift of sleep . . ."
31. "America, thou half-brother of the world . . ."
32. "If Music and sweet Poetry agree,
    As they must needs (the Sister and the Brother) . . ."
33. "France, mother of arts, of warriors, and of laws . . ."

If you enjoyed reading the Lime Power Builders, you might also enjoy the following Literature Selections:

19. *Of This Time, Of That Place*
20. *The Man That Corrupted Hadleyburg*
21. *The Dead*

1

Geraldine Ferraro, Making History

by Margeret W. Brimacombe

1 "'Gerr-eee. Gerr-eee.' The noise from the convention floor rolled up and over the podium until I could almost feel it. . . . There seemed to be a sea of women on the floor. . . . This night belonged to women. . . ." So says Geraldine Ferraro in her book, *Ferraro, My Story,* an account of her 1984 campaign for the vice-presidency of the United States. This former "housewife from Queens" became the first woman named by a major political party to run for this high office.

2 In 1979, Geraldine Ferraro was a relatively unknown politician newly elected to Congress. Five and one-half years later she stood before a wildly cheering throng at the Democratic National Convention in San Francisco and accepted the party's nomination. She had made political history, but would she, if given the opportunity to reconsider, make the same decision?

AP/Wide World Photos

3 Advisors to Walter Mondale, a presidential candidate, had initially approached Ferraro over a year before the convention and had asked her to become chairperson of the Mondale campaign but Ferraro, a pragmatic politician, refused, believing it unwise to commit herself so early to any candidate.

4 Eventually, Mr. Mondale's staff began to investigate thoroughly Ferraro's qualifications as a potential vice-presidential candidate. They ascertained that Ferraro was the daughter of an Italian immigrant father and an Italian-American mother and was proud of her heritage. The premature death of her father left her mother with the burden of supporting Gerry and her brother, and the family moved to the deteriorating South Bronx area of New York City. From then on Ferraro was determined to work and study her way out of that devastated neighborhood.

5 After her college graduation in 1956, Ferraro taught elementary school and completed her law-school studies in the evenings. Following her marriage to John Zaccaro, she spent fourteen years primarily involved in raising a son and two daughters. In 1974, Ferraro, who has kept her maiden name in tribute to her hard-working independent mother, began work as an assistant district attorney in Queens. Her involvement in local and national issues and in correcting inequities to women led her to seek election to Congress in 1978.

6 In the House of Representatives, some of her primary concerns were U.S. policies in Central America and the Middle East, and the nuclear arms race. She favored a mutual, verifiable freeze on nuclear weapons and supported measures to protect the environment. She also became involved in issues affecting women, like pension reform, comparable worth, flextime, and the Equal Rights Amendment.

7 When Ferraro entered Congress in 1979, there were only seventeen female members in the House, only two serving on prestigious committees such as Rules and Appropriations, and none serving on Budget or Ways and Means. Ferraro quickly learned that, in order to be most effective to her constituents, she had to move within the power structure of the House. In 1980, she was elected Secretary of the Democratic Caucus and became a

Adapted from the book FERRARO: My Story *by Geraldine A. Ferraro with Linda Bird Francke, published by Bantam Books. Copyright 1985 by Geraldine Ferraro. By permission of Geraldine Ferraro.*

member of the powerful Steering and Policy Committee. From this position, she won a seat on the Budget Committee. Ferraro had achieved, in a traditionally male stronghold, a forum where she could be seen and heard.

8 The Democrats had recognized the steadily growing potential of the women's vote after the 1980 presidential election, and beginning in 1983, various national women's organizations called for a woman vice-presidential candidate. A small group of politically active women, calling itself Team A, had two goals: to defeat the popular Republican incumbent, Ronald Reagan, and to advance the concept of a woman vice-president. Team A canvassed a number of female politicians, including Geraldine Ferraro, to determine whether any would consider becoming a candidate.

9 In November of 1983, dubious about the possibility of a candidacy but anxious to promote the concept of a female national candidate, Ferraro allowed Team A to circulate her name. Working with them, in January of 1984, she became the first woman to chair the Platform Committee for the Democratic Convention. As she held hearings throughout the United States, her name began to draw attention to the vice-presidential sweepstakes. Ferraro had entered the race.

10 Just before she departed for the convention in San Francisco, Mondale aides informed Ferraro that she was being seriously considered for the second spot on the Democratic ticket. Asked if she could represent Mondale in the campaign and promote his domestic and international policies, Ferraro answered affirmatively. She had shown that she possessed the stamina for arduous campaigning in her three congressional races. Information given regarding her personal life and that of her family revealed nothing that would hinder her candidacy. Did she feel prepared to assume the presidency if Walter Mondale were to die in office? Ferraro expressed confidence that she could lead the country. On July 11, Walter Mondale telephoned Geraldine Ferraro and asked her to be his running mate.

11 Ferraro plunged into the frenzy that surrounds a candidate for election to national office as press and opponents initiated their strategies to "report the news." Queries about her finances and those of her husband were made and reported in the media; in a ninety-minute press conference, Ferraro faced her inquisitors and candidly answered their allegations. While Ferraro thought she had put the matter to rest, the controversy persisted even after the election. Activists opposing abortion protested Ferraro's stand favoring individual choice; the alienation of some Catholic leaders failed to shake her faith or her belief in the Constitution's separation of church and state. Throughout the storm of criticism Ferraro tried in vain to focus attention back to issues critical to national interests. She began to regret that she had ever agreed to run, but she was determined to fight back with style.

12 During this trying period Ferraro flew in and out of as many as five states in a day, and her appearances drew enthusiastic crowds, although the polls of candidates' standings were discouraging. In addition, the continued personal attacks were taking a terrible toll on her family. As political analysts predicted a Reagan victory, only the thought of the historical significance of her candidacy as a breakthrough for women sustained her.

13 The week preceding the election, Ferraro, in an appearance at Valley College in Van Nuys, California, finally had the opportunity to articulate her feelings about the extraordinarily difficult months of the campaign and what sustained her. "My candidacy is not just for me; it's for everyone. It's not just a symbol. It's a breakthrough. It's not just a statement. It's a bond between women all over America. My candidacy says America believes in equality, and the time for that equality is now."

14 On election day, after having voted in Queens, Ferraro went to her district office to finalize some congressional matters before her term expired. That evening with her family she watched the devastating returns on television. After Mondale and she made their statements of concession, she retired, confident that she and her supporters had done everything possible to win the election. The election results showed that the Republican candidates for president and vice-president, Ronald Reagan and George Bush, had won in every state except Minnesota—the home state of Walter Mondale.

15 In making history, Geraldine Ferraro had proved that women can run creditably for high political office. She had shown that women have the stamina, the acumen, and the understanding of national and international issues to deserve

equal consideration with men as candidates.

16 Ferraro—and her family—had paid a high price for her candidacy. Was it worth it? Ferraro concludes her book with this anecdote: At a reception for her several months after the election, a Team A member spoke with a young woman.

17 "'I want to run for president in '96,' the young woman, a student at Sarah Lawrence College, was saying. 'What do I have to do to get ready?'

18 "Joan [McLean] didn't blink an eye. 'Give me your name and number and we'll be in touch,' she answered, taking out her notebook.

19 "I smiled. That moment said it all. My candidacy was worth it. Absolutely."

HOW WELL DID YOU READ?

How carefully did you read?

1. **Ferraro's first government position was**
   - **A** representative from Queens
   - **B** assistant district attorney
   - **C** senator from New York
   - **D** special counsel to President Kennedy

2. **Ferraro refused to head Walter Mondale's campaign for president because she**
   - **A** preferred to spend her time working for her constituency
   - **B** had her own campaign to run
   - **C** opposed some of Mondale's policies and could not promote them
   - **D** believed it was too early to align herself with a particular candidate

3. **Which of these first influenced Ferraro to become a candidate for vice-president?**
   - **A** The support of Team A
   - **B** Her appointment as platform committee chairperson
   - **C** The telephone call from Walter Mondale
   - **D** None of the above

4. **Of these positions taken by Ferraro, the most controversial was probably her support for**
   - **A** a verifiable freeze on nuclear weapons
   - **B** individual choice regarding abortion
   - **C** passage of the Equal Rights Amendment
   - **D** comparable worth

5. **Which probably accounts most for the defeat of the Democratic candidates in 1984?**
   - **A** A poorly organized campaign
   - **B** The difficulty of defeating an incumbent
   - **C** The positions taken on controversial issues
   - **D** Voter apathy

6. **It is probably safe to predict that as a result of Ferraro's nomination**
   - **A** female candidates will be considered political liabilities
   - **B** the Equal Rights Amendment will be passed by the U.S. Congress
   - **C** women will be considered for national office more frequently
   - **D** there will be a male backlash at the polls

7. **Geraldine Ferraro's rise to vice-presidential nominee can best be described as**
   - **A** a typical American success story
   - **B** the result of having the right connections
   - **C** the achievement of a goal set years before
   - **D** an impromptu, unplanned-for event

8. **With which of these statements would Geraldine Ferraro be most likely to agree?**
   - **A** Winning the game isn't as important as being asked to play.
   - **B** In politics, good luck is more important than hard work.
   - **C** Candidates for public office should never look back with regret.
   - **D** Women in the United States are discriminated against.

9. **The author's purpose in this article was to**
   - **A** persuade the reader to vote Democratic
   - **B** inform the reader about Ferraro's political career
   - **C** entertain the reader with anecdotes about the 1984 presidential campaign
   - **D** all the above

Did you understand the character?

10. **Which characteristics of Geraldine Ferraro are brought out best in this article?**
    - **A** Tact and energy
    - **B** Friendliness and intelligence
    - **C** Talent and determination
    - **D** Humor and perseverance

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. markedly practical *(3)*
2. becoming less valuable; worsening *(4)*
3. unjust conditions or situations *(5)*
4. capable of being monitored *(6)*
5. people whose interests are being served by the politician *(7)*
6. current officeholder *(8)*
7. examined; asked the opinions *(8)*
8. difficult; strenuous *(10)*
9. questioners *(11)*
10. admission of defeat *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. office *(1)*
    - **A** place of business
    - **B** position in government
    - **C** room assigned to an employee

12. raising *(5)*
    - **A** bringing up; rearing
    - **B** awakening; arousing
    - **C** lifting up; elevating

13. spot *(10)*
    - **A** stain or blotch
    - **B** defect or flaw
    - **C** position or place

14. expired *(14)*
    - **A** died
    - **B** breathed out
    - **C** came to an end

15. retired *(14)*
    - **A** went to bed
    - **B** ended a career
    - **C** retreated; withdrew from danger

C. The Greek word *helics* and the Latin word *sol* are equivalents of the Anglo-Saxon word *sunne,* meaning "sun." Appearing as *helio* and *sol,* they form the **roots** for many English words.

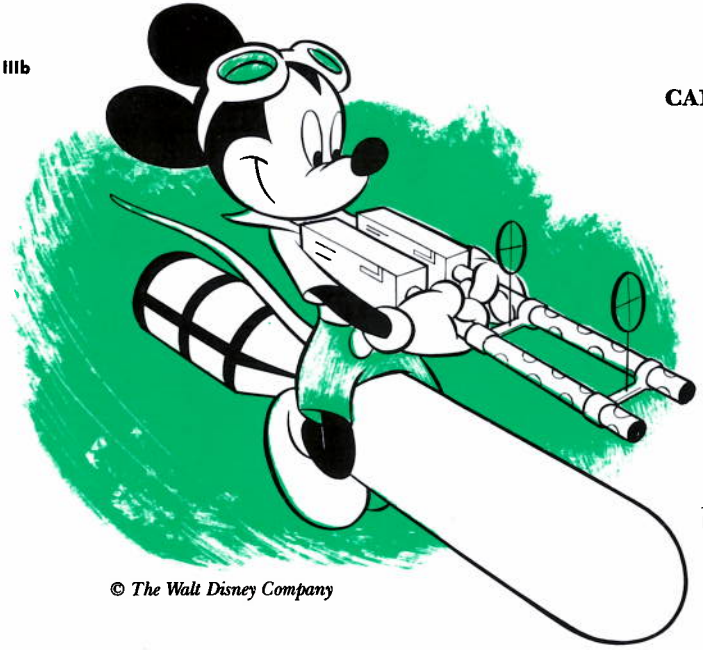
Directions: The words in column II have the root *helio* or *sol.* Write the word that best fits each definition in column I.

I	II
16. sunshade	solar
17. sun worship	heliocentric
18. instrument for measuring sunlight	solarize
19. treatment of disease by exposure to sunlight	heliolatry
20. of the sun	solarium
21. point of a planet's orbit closest to the sun	heliograph
22. sunroom; glass-walled room	heliotherapy
23. having the sun as a center	perihelion
24. affect by exposing to sunlight	parasol

D. Synonyms are words that have the same or nearly the same meaning. **Antonyms** are words that have opposite or nearly opposite meanings.

Directions: In each line in column I, find the two words that are related as synonyms. Then find their antonym in column II and write it.

I	II
25. reliable, right, trustworthy	whole
26. persisted, asked, continued	uncommon
27. useful, sufficient, enough	undependable
28. usual, customary, special	forbidden
29. emptied, shunned, avoided	vague
30. flawless, fancy, perfect	sought
31. detailed, unique, specific	inadequate
32. fractional, uneasy, partial	quit
33. needed, permissible, allowed	defective



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CARICATURES ARE THE WORLD'S

Most Popular Characters

by Farrell and Wilbur Cross

1 During World War II an American bomber was attacked by Japanese fighter planes over the Pacific. Limping along on its single functioning engine, it reached a small, jungle-clad island, where the pilot managed to crash-land on a stretch of beach. The crew, aware that they were safe perhaps only for the moment, clambered out of the damaged aircraft speculating on the disposition of the natives: Would they be friendly? The answer was not long in coming; soon a group of half-clothed warriors, armed with antediluvian weapons, could be seen edging warily out of the underbrush. The Americans nervously fingered their sidearms; the tension increased. Suddenly one of the natives broke from his fellows and raced toward the plane.

2 "Mikki Muss! Mikki Muss!" he shouted delightedly, pointing to the nose of the ship where, painted in characteristic air force fashion, a Mickey Mouse rode astride a huge aerial bomb.

3 Mickey Mouse, who has probably enjoyed more widespread popularity than any other single cartoon character in the world, typifies the universal appeal of cartoons and caricatures. What is this appeal? "People read comics," says one authority, "because they find themselves reflected in them." By observing comic characters in embarrassing but painfully familiar situations, readers see, with some relief, that they are not alone.

4 The use of the cartoon as a medium of expression is by no means a recent development—historians who care to stretch the point can show evidence of humorous drawings on the walls of caves inhabited some twenty thousand years ago, during the Reindeer Age. The real history of comic art, however, began (to set an arbitrary date) in the latter half of the first century A.D., about the time that Pompeii was embalmed in volcanic ash. Examples of wall art from the period include many scenes that appear to presage early American comic strip sterotypes: the innocent dupe about to be victimized by a practical joker; the henpecked husband being scolded by his shrewish wife; the scoundrel about to be clobbered on the head with a stick.

5 Cartoons, through the ages, have not only met the needs of people to attempt to make light of their own misery, but have also reflected the attitudes and activities of the times. The cartoons of two thousand years ago, in an age when people died young and bloodshed was common, tended to reflect murder and violence; cartoons of more primitive peoples often showed semi-religious themes, with mortals at the mercy of the gods; the drawings of the Middle Ages re-

Based on "The World's Most Popular Characters" by Farrell and Wilbur Cross, Cosmopolitan, *1961.*
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flected the same bawdy humor found in Chaucer. Yet, throughout history there is a remarkable recurrence of themes strongly in evidence today.

6 Comic art as we know it today was founded in the great Age of Caricature, which encompassed the period from the middle of the eighteenth century to the middle of the nineteenth. In England, during the reign of Queen Anne, William Hogarth established himself as the father of English caricature by satirizing politics, manners, and morals. He used the comic-strip technique in his famous series of engravings, *The Rake's Progress,* and was one of the first cartoonists to utilize the balloon to contain the speeches of his characters.

7 The comic strip itself came into being in the United States through the deadly competition between two newspapers. It began in 1896, although in Europe regular comic strips had existed earlier; in February of that year the old *New York World,* seeking an unusual method of increasing its circulation, decided to try an experiment, chiefly to test out the problem of printing with yellow ink.

8 That Sunday, in the section of the newspaper devoted to funny drawings, readers of the *World* discovered three-quarters of a page entitled "The Great Dog Show on M'Googan's Avenue." Drawn by Richard F. Outcault, it featured a bald-headed, large-eared boy in what looked like a tattered, outsized nightgown colored bright yellow. This was the "Yellow Kid," a character who was to stimulate the birth of many other comic and bizarre cartoon figures in the next few years. The urchin survived just long enough to give the comics their start, arouse the competitive envy of other newspapers, and inspire the term *yellow journalism* to describe any manner of newspaper reporting that was sensational in nature.

9 Soon comics were so prevalent as to attract the attention of serious critics. One reader of *Mutt and Jeff* in its early days gave voice to a characteristic attitude when he complained, "It is not clear what these comics are. We cannot call them caricatures, for a caricature is based upon, or aimed at, something that exists. . . . But these effigies under consideration have no actual relationship with anything that is to be seen upon our earth."

10 Despite the critics, comics flourished in metropolitan newspapers from coast to coast and, in 1915, nationwide syndication was instituted, carrying the comics to rural and small-town papers. Editors began to realize that their cartoonists were influential; circulation rose and fell according to the types of comics a newspaper carried. A cartoonist had merely to depict his character in a dangerous situation to generate a truckload of mail from readers with ideas about how the character could escape.

11 The other side of the cartoon business, political cartooning, attained a similar rapid rise to solid prominence. One of the first and most famous examples of cartoon satire in America was published by Benjamin Franklin in the *Pennsylvania Gazette* of May 9, 1754. It was a crude device—a snake cut into eight segments, representing the American colonies, with the inscription "Join, or Die." With the birth of the new nation, political campaigns and issues became the prime subject of the caricaturist's art; controversial political figures were always depicted with huge noses, grasping hands, or large ears that were invariably attuned to words being spoken by the devil.

12 Though some of the early American political cartoons would look crude and lacking in imagination to us today, they helped to make American history. The term *gerrymander* (to divide an area into election districts in an unfair way, calculated to control the election results in one's favor) was born with Elkanah Tisdale's famous cartoon of 1812, pointing out the dragon shape made by a group of unfair political districts created by Governor Gerry in Essex County, Massachusetts. The cartoon and the word are still used to refer to outrageous political practices.

13 One of the best examples of the cartoonist's power was that of Thomas Nast, who in the 1870's pitted his art against the corruption of Boss William Tweed and Tammany Hall in New York. His cartoons, more than any other factor, were responsible for driving Tweed off his throne and sending some of his Tammany pals off to prison or oblivion. Nast was the creator of such familiar symbols as the Tammany tiger and the G.O.P. elephant. Although he did not originate the Democratic donkey, he popularized it.

14 Perhaps the most popular characters in the

comics of the future will be those created by political cartoonists. Already political cartooning has become such an important aspect of journalism that there is a Pulitzer Prize especially for this field. Be that as it may, one thing seems certain—cartoons are here to stay. Cartoons appeal to persons of all ages, nationalities, colors, races, and creeds; because of their simplicity and basic attraction, they are recognized, understood, and appreciated by scholars and illiterates alike.

HOW WELL DID YOU READ?

Did you see the writers' point?

1. **The significance of the opening anecdote lies in the contrast between the**
   - **A** seriousness of war and the humor of the comics
   - **B** primitiveness of the natives and their familiarity with cartoons
   - **C** modern plane and the natives' antediluvian weapons
   - **D** suspicions of the airmen and the friendliness of the natives

2. **The opinion of the critic in paragraph 9 and the opinion of the writers are**
   - **A** identical in some respects
   - **B** totally different
   - **C** identical in all respects
   - **D** substantially the same

3. **The story of Boss Tweed and Thomas Nast shows**
   - **A** the potential power of political cartoonists
   - **B** how humor can be used as a weapon
   - **C** how cartoons can influence the attitudes of the readers
   - **D** all of the above

4. **Many Roman cartoons of the first century A.D. contained**
   - **A** less murder and violence than today's
   - **B** little that could be called true humor
   - **C** mainly semireligious themes
   - **D** themes that have always been popular

Do you remember the important facts?

5. **The greatest psychological appeal of cartoons lies in the fact that**
   - **A** cartoons oppose the attitudes of the times
   - **B** people can identify themselves with cartoon characters
   - **C** people like to escape from their everyday problems
   - **D** laughter is revitalizing

6. **The cartoon *The Yellow Kid* was**
   - **A** an experiment that became a classic
   - **B** a short-lived, sensational feature
   - **C** a copy that was more successful than the original
   - **D** the first real caricature

Did you recognize cause and effect?

7. **Criticism such as that directed at *Mutt and Jeff* was**
   - **A** an aid in popularizing comics
   - **B** almost the downfall of the new features
   - **C** proof that comics were important
   - **D** a revelation of the weakness of the comics

8. **Nationwide syndication made it possible for rural newspapers to**
   - **A** carry the same comics city papers carried
   - **B** hire more cartoonists of their own
   - **C** make their local comics popular elsewhere
   - **D** diversify in many unrelated areas

Can you draw the right conclusions?

9. **The Pulitzer Prize for political cartooning is an indication of the**
   - **A** universal appeal of cartoons
   - **B** stature cartooning has achieved
   - **C** influence of good journalism
   - **D** public's faith in journalism

10. **Cartoons will probably continue to exist as long as**
    - **A** daily newspapers are published
    - **B** human nature remains the same
    - **C** controversial issues are present
    - **D** there exists a need for reform

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. climbed *(1)*
2. exemplifies *(3)*
3. predict *(4)*
4. taken advantage of *(4)*
5. very strange *(8)*
6. small boy *(8)*
7. images; likenesses *(9)*
8. produce *(10)*
9. matched *(13)*
10. phase *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. broke *(1)*
    - **A** escaped
    - **B** started
    - **C** separated

12. situations *(3)*
    - **A** locations
    - **B** jobs
    - **C** circumstances

13. medium *(4)*
    - **A** means
    - **B** environment
    - **C** something indeterminate

14. reflected *(5)*
    - **A** thought about
    - **B** mirrored
    - **C** thrown back

15. issues *(11)*
    - **A** outlets
    - **B** matters
    - **C** results

C. *poly* (much; many; more than one)
pan (all; every)

A knowledge of these **prefixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the prefix *poly-* or *pan-* to complete each word so that it fits the definition. Write the word.

16. __acea (a cure-all; a medicine for all diseases)
17. __chrome (of many colors; sensitive to many colors)
18. __demic (of all the people; universal)
19. __gamy (practice of marriage with more than one wife)
20. __glot (speaking many languages well)
21. __theon (temple erected in honor of all the gods)
22. __theism (belief in many gods)
23. __orama (unlimited view in all directions)
24. __demonium (originally, the palace of all the devils; now, confusion)

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says.

It is *as good as* lost.

As good as is an idiom meaning "nearly" or "practically."

Directions: The idioms in column II are built on the word *good.* Write the idiom that best fits each meaning in column I.

I	II
25. very; entirely	come to no good
26. useless; worthless	for good and all
27. as a profit	good and
28. able to pay or give	make good
29. large quantity	no good
30. end in failure	to the good
31. kind; generous	good deal
32. repay for; replace	good-hearted
33. permanently; finally	good for

3

Twins, Genes, and Environment

by Ashley Montagu

1 Heredity or environment: which is stronger? The potentialities with which a person is born naturally relate in some way to what he does in life; but the belief that what a person is born with *determines* what he will later do, and that therefore heredity is fate, a kind of predestination, is stultifying and damaging. On the other hand, when heredity is understood in the light of scientific fact, it is seen to be a science whose findings enable us to improve the welfare and happiness of humankind.

2 The usual definition of heredity is that it is the innate equipment of the individual—his genetic endowment. This endowment is conferred on the individual through infinitesimal units called genes, tiny particles of matter that constitute the basic genetic material from which an individual develops. However, genes do not work in a vacuum; as soon as we begin considering the role that they play in the development of the individual as a functioning organism, we see that there can be no development without the interacting environment. No characteristic is caused exclusively by environment.

3 The relative effects of heredity and environment in interaction are most clearly observable in identical twins. Of the approximately seventy thousand sets of twins born in the United States each year, two-thirds are fraternal twins, who resemble each other no more closely than do brothers and sisters born at different times. One-third of the twin births result in identical, or monozygotic, twins—twins who developed from the same fertilized egg, and so contain the same set of genes. Monozygotic twins are always of the same sex and resemble each other so closely that they are hardly distinguishable.

4 Most identical twins are reared together and are remarkably alike in both appearance and behavior; such cases demonstrate that individuals with the same genes, when reared in the same environment, will respond to it in much the same way. They do not indicate what would happen if these identical but separate individuals were reared in different environments.

5 A number of studies have been made of identical twins reared apart, and all findings concur that there are both remarkable likenesses and remarkable differences between them. The twins who were the subjects of these studies lived in America, were reared in much the same physical environments, and experienced much the same nutritional histories; therefore, as might have been expected, in physical appearance, height, and weight they maintained the closest resemblance to each other. Exceptions occurred when one twin had developed a rather severe illness and the other had not; but on the whole everyone is impressed by the great psychological and physical likenesses that exist between monozygotic twins, even those who have been separated from infancy.

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6 In a study of nineteen sets of twins who had been separated from birth, investigators found that in all but six of the sets there were no more significant differences than existed among unseparated pairs of twins. This strongly suggests the power of the genes and the limitation of the effect of environment. However, it must be remembered that, although the identical twins who were studied lived in different families far removed from each other, the environments in those families were not, on the whole, substantially different. Usually every effort would be made to put each child in a home with a background similar to that of its own family, and therefore it should not be surprising to find that the twins developed similarly. But in those cases in which there had been a greater difference in the environments of the separated twins, the differences between the twins were more substantial.

7 First let us look at the case history of one set of separated identical twins that throws a rather astonishing light upon the power of the genes. Edwin and Fred were separated in very early infancy and were adopted by families of essentially the same social and economic status who lived in the same town. They attended the same school for a time, but were not aware of their relationship. When the boys were about eight years old, the families both moved away and became permanently separated. Edwin lived most of his life in a large city in eastern Michigan, and Fred in a medium-sized city in western Iowa. On the whole there seem to have been no marked differences in their social environments.

8 When they were adults, the twins learned of each other's existence. Arrangements were made for the pair to meet, and the following facts emerged: Edwin and Fred looked as like each other as identical twins reared together. In height and weight they were similar; their eye color, hair color and form, hairline, beard, complexion, ears, features, and teeth were virtually identical. Though they had been long separated, Edwin and Fred had led remarkably parallel lives. Each had been reared as if he were an only child, and both had had about the same amount of education. Both had developed an interest in electricity and had become expert repairmen in branches of the same telephone company. They had married young women of about the same age and type, each in the same year. Each had a baby son, and each—believe it or not—owned a fox terrier named Trixie!

9 Edwin and Fred illustrate what may happen when identical twins, though separated, grow up in similar environments. Now let us observe a case illustrating what happens to identical twins when they are brought up in contrasting environments.

10 Gladys and Helen were born in a small Ohio town and were separated at about eighteen months of age. They did not meet again until they were twenty-eight years old. Helen had been twice adopted. Her first foster parents had proved to be unstable, and Helen had been returned to the orphanage after a couple of years; after several months she was again adopted, by a farmer and his wife who lived in southeastern Michigan. This was her home for the next twenty-five years. Her second foster-mother, though she had had few educational advantages herself, was determined that Helen should receive a good education; Helen eventually graduated from college, taught school for twelve years, married at twenty-six, and had a daughter.

11 Gladys was adopted by a Canadian railroad conductor and his wife. When she was in the third grade, the family moved to a rather isolated part of the Canadian Rockies, where there were no schools, and Gladys' formal education came to an end, not to be really resumed even when the family returned to Ontario. She stayed at home and did housework till she was seventeen, and then went to work in a knitting mill. She went to Detroit at nineteen, got a job, and married when she was twenty-one.

12 Helen had been healthier than Gladys, in childhood and adulthood, but aside from that, their environments had been very similar except for their educations. Their weight, height, hair color, and teeth were highly similar. The differences that distinguished them were obviously associated with the different social lives they had led.

13 Helen was confident, suave, graceful, made the most of her personal appearance, and showed considerable polish and ease in social relationships. Gladys was diffident, ill at ease, staid and stolid, without charm or grace of manner. A scientist who studied them remarked, "As an adver-

tisement for a college education the contrast between these two twins should be quite effective."

14 Considering the nature of their environmental experiences, the differences in Helen and Gladys are not surprising. Since psychological traits depend so much upon experience, it is to be expected that they will reflect it. On the other hand, traits that are not liable to be influenced by the environment are more likely to exhibit a high degree of similarity in identical twins. Important as they are, genes alone are never absolutely responsible for any trait. What we can do is set by the genes, but what we actually do is largely determined by the environment.

HOW WELL DID YOU READ?

What did the writer say?

1. **The belief that inborn potential predetermines what a person will do is**
   - **A** always accurate
   - **B** more often accurate than not
   - **C** a harmless error
   - **D** a dangerous misconception

2. **Of the nineteen sets of twins, most showed**
   - **A** no significant differences
   - **B** major differences caused by environment
   - **C** major differences from unknown causes
   - **D** differences caused by illness and diet

3. **Except for one important point, the environments of Helen and Gladys were**
   - **A** similar
   - **B** dissimilar
   - **C** identical
   - **D** not compared

4. **The writer believes that genes are**
   - **A** in no way responsible for any character trait
   - **B** never absolutely responsible for any character trait
   - **C** responsible for most character traits
   - **D** responsible for all character traits

Did you understand why?

5. **Monozygotic twins are useful in genetic studies because they may have**
   - **A** identical genes; different environments
   - **B** identical environments; different genes
   - **C** different genes; different environments
   - **D** either **A** or **B**

How well do you reason?

6. **The case of Edwin and Fred primarily shows the influence of**
   - **A** environment
   - **B** heredity
   - **C** education
   - **D** none of the above

7. **The fact that Edwin and Fred knew each other in school is a point that**
   - **A** probably lessens the validity of the whole experiment
   - **B** has little or nothing to do with the experiment
   - **C** proves the point of the experiment
   - **D** makes the experiment almost useless

8. **The parallel lives of Edwin and Fred are**
   - **A** an extreme example
   - **B** a common phenomenon
   - **C** a misleading coincidence
   - **D** an occurrence to be expected

What evidence did the article give?

9. **The assumption that persons with identical genes will react to the same environment the same way is**
   - **A** proved by the author
   - **B** undemonstrable
   - **C** accepted by the author
   - **D** ignored by the author

10. **Traits most influenced by environment are**
    - **A** psychological
    - **B** physical
    - **C** intellectual
    - **D** hereditary

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word by its context–the words around it.

Directions: Find the word in the paragraph that means

1. latent capabilities *(1)*
2. rendering effort worthless *(1)*
3. gift of nature *(2)*
4. too small to be measured *(2)*
5. meaningful *(6)*
6. practically *(8)*
7. closely similar *(8)*
8. set apart *(12)*
9. smoothly gracious *(13)*
10. lacking confidence *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. naturally *(1)*
    - **A** as one might expect
    - **B** innately
    - **C** not artificially

12. maintained *(5)*
    - **A** carried on
    - **B** defended
    - **C** kept

13. marked *(7)*
    - **A** scarred
    - **B** singled out
    - **C** noticeable

14. unstable *(10)*
    - **A** irregular
    - **B** not fixed
    - **C** unreliable

15. polish *(13)*
    - **A** gloss
    - **B** refinement
    - **C** cleaning substance

C. *hyper* (over; above; more than normal)
hypo (under; beneath; below; less than)

A knowledge of these **prefixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the prefix *hyper-* or *hypo-* to complete each word so that it fits the definition. Write the word.

16. _____bole (an exaggeration)
17. _____geal (of things below the earth's surface)
18. _____borean (of a far northern region)
19. _____critical (overly critical)
20. _____critical (pretending to be what one is not)
21. _____tonic (able to hear very high tones)
22. _____tonic (having abnormally low tone)
23. _____dermic (injected under the skin)
24. _____sensitive (excessively sensitive)

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says.

I'll make him *eat his words.*

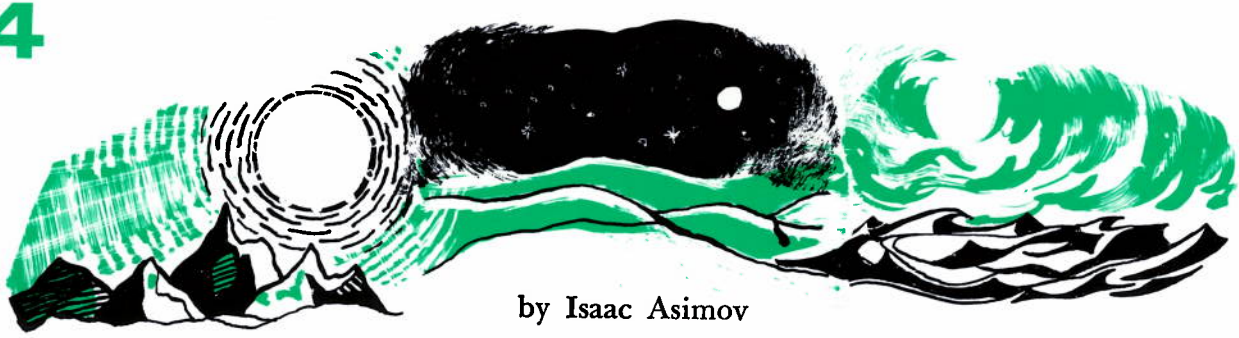
Eat one's words is an idiom meaning "take back what one has said."

Directions: The following idioms are based on the word *word.* Write the idiom that best fits each sentence.

have a word with	at a word
word for word	in a word
by word of mouth	have words with
have no words	of few words
man of his word	

25. Rumors usually spread _____.
26. He was ready to go _____ from me.
27. I would like to _____ you if you have time.
28. I _____ to express my gratitude.
29. I don't wish to _____ him; I would like to avoid an argument.
30. My answer, _____, is that I don't know.
31. We can trust him; he is a _____.
32. She doesn't say much; she is a woman _____.
33. That is exactly what he said, _____.

4



by Isaac Asimov

LIFE on Other Planets

CHEMISTRY GIVES CLUES TO WHAT IT MIGHT BE

1 In 1961, scientists set up gigantic, sensitive apparatus to collect radio waves from the far reaches of space, hoping to discover in them some mathematical pattern indicating that the waves were sent out by other intelligent beings. The first attempt failed; but someday the experiment may succeed.

2 What reason is there to think that we may actually detect intelligent life in outer space? To begin with, modern theories of the development of stars suggest that almost every star has some sort of family of planets. So any star like our own sun (and there are billions upon billions of such stars in the universe) is likely to have a planet situated at such a distance that it would receive about the same amount of radiation as the earth.

3 Furthermore, such a planet would probably have the same general composition as our own; so, allowing a billion years or two—or three—there would be a very good chance for life to develop, if current theories of the origin of life are correct.

4 But *intelligent* life? Life that has reached the stage of being able to send radio waves out into space in a deliberate pattern? Our own planet may have been in existence for five billion years and may have had life on it for two billion, but it is only in the last seventy-five that intelligent life capable of sending radio waves into space has lived on Earth. From this it might seem that even if there were no technical problems involved, the chance of receiving signals from any particular earth-type planet would be extremely small.

5 This does not mean that intelligent life at our level does not exist somewhere. There is such an unimaginable number of stars that, even at such miserable odds, it seems certain that there are millions of intelligent life forms scattered through space. The only trouble is, none may be within hailing distance of us. Perhaps none ever will be; perhaps the appalling distances that separate us from our fellow denizens of this universe will forever remain too great to be conquered. And yet it is conceivable that someday we may come across one of them or, frighteningly, one of them may come across us. What would they be like, these extraterrestrial creatures?

6 Surely, it would seem, there is no way of telling. Here on Earth alone, life has developed in many directions, taking on forms that could scarcely be invented by the wildest imagination if they were not already known to exist.

7 Who would dream that a mouse could fly, never having seen a bat? Who would predict blind lizards living in caves, or worms living in the

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intestines of other creatures? Consider the giraffe, the hummingbird, the redwood tree, the Venus's-flytrap, and then see whether you can imagine any limit to the fantasia of life. So how can anyone predict anything at all about extraterrestrial beings?

8 Ah, but all these variations and modifications that exist on Earth are in some ways only superficial. In the chemist's test tube, all that splendid diversity boils down to what is, after all, really a dull, flat sameness. Whatever appearance Earth creatures may have, they are all made up of the same kinds of complex molecules; with minor variations, they all make use of the same chemical machinery.

9 For all its wonderful differences, life on Earth is merely an imaginative variation on a single chemical theme. Life on any earthlike planet may prove to be similar.

10 As we understand life, it consists of molecules large enough and complex enough to meet the infinitely flexible requirements of living tissue. The molecules must be stable enough to retain their structure under some conditions, and unstable enough to change kaleidoscopically under other conditions. In living things on Earth, the most important molecules of this type are the proteins, and as far as we know, nothing will substitute for them.

11 Furthermore, the changes these proteins undergo in the business of living can only take place against a watery background. Life began in the oceans, and even the various forms of land life are still from 50 to 80 percent water.

12 The chemical theme, then, upon which life plays its variations, here and possibly on all earth-type planets, is protein-in-water. If we are ever to meet up with creatures from an earth-type planet, we may not be able to predict their appearance, but we can predict that, whatever their shape, they will very likely be protein-in-water.

13 But what about life on planets that are *not* like the earth? What about planets so close to their sun that their surfaces are hot enough to melt lead? What about planets so far from their sun that water is eternally frozen? Are such worlds perpetually barren? It would seem so, certainly, if all life were only protein-in-water.

14 But can we be sure that life cannot be based on other themes? Suppose, for instance, that in a world on which liquid water cannot exist because of frigid temperatures, there was a substance that could take the place of water. Actually, there is such a substance, and it is called ammonia.

15 Everyone is familiar with the bottled ammonia that looks like water but has a pungent smell. This is actually only ammonia dissolved in water; ammonia itself is a gas at ordinary temperatures. Under conditions on Earth it does not become a liquid until it is cooled to thirty degrees below zero Fahrenheit, and does not freeze until a temperature of one hundred degrees below is reached.

16 The cold worlds of our own solar system, such as Jupiter and Saturn, have thick atmospheres that are mainly hydrogen and helium but contain a strong mixture of ammonia. There is good reason to think that any large cold planet would have an atmosphere of this sort. It is conceivable, then, that such planets, even with all water frozen into ice, might have oceans of liquid ammonia in which life might develop in a completely alien manner.

17 Actually, ammonia strongly resembles water in the way it dissolves substances, so the theme of protein-in-ammonia is fascinatingly possible under conditions where the temperature is too cold for protein-in-water.

18 What about the hot planets close to a sun? Certainly there would be no water; if any existed at the beginning, it would have boiled away eons ago. Perhaps life would develop in substances that are liquid at high temperatures. Sulfur is liquid between temperatures of 235 and 800 degrees Fahrenheit. Could there be sulfur-based life? If there is, it could scarcely be based on ordinary protein, which would be highly unstable at such elevated temperatures. There are molecules called silicones which could conceivably be built into complex structures able to survive high temperatures. Silicones have been developed in the laboratory here on Earth. Solid silicones serve, among other things, as a kind of artificial rubber, and liquid silicones have been used as hydraulic fluids. Can we picture life forms on hot planets with rubbery tissues and hydraulic-fluid bloodstreams, living in puddles of liquid sulfur?

19 We have already undergone a radical broadening of thought in beginning to accept the fact that we may not be the only world of living creatures in the universe—not even, perhaps, the only living intelligences. Will we someday undergo another broadening of thought and accept our-

selves as an example of only one of the possible chemical themes of life? If so, is it possible that we will find ourselves studying, with fascination, the absolutely alien life chemistry of the silicone Hots and the ammonia Colds, with ourselves only examples of the protein-in-water In-Betweens? I can't help hoping that as we venture into space we will find things beyond even our wildest speculations. And why not? In science, as in everything human, it is the chance of the unexpected that lends spice to endeavor.

HOW WELL DID YOU READ?

Can you draw the right conclusions?

1. **The author feels that the failure of the 1961 radio-wave experiment was**
   - **A** surprising
   - **B** to be expected
   - **C** dismaying
   - **D** helpful

2. **Had radio waves from another planet reached the earth one hundred years ago, the earth would have**
   - **A** sent an immediate answer
   - **B** replied after a few years
   - **C** sent no answer
   - **D** answered a few years ago

What did the author say?

3. **The Venus's-flytrap and the hummingbird are**
   - **A** amazingly different, but basically alike
   - **B** superficially alike, but often fundamentally different
   - **C** not like each other in any way
   - **D** unlike any life we will find elsewhere in space

4. **The thing man can most accurately predict about living things on an earth-type planet is their**
   - **A** appearance
   - **B** chemical composition
   - **C** degree of intelligence
   - **D** size

5. **The author believes that all intelligent life must be**
   - **A** composed of protein-in-water
   - **B** able to send out radio waves in a mathematical pattern
   - **C** both **A** and **B**
   - **D** neither **A** nor **B**

Did you grasp the significant facts?

6. **Life based on protein-in-water is possible on a planet where**
   - **A** water exists only as ice
   - **B** ammonia exists as a gas
   - **C** sulfur exists as a liquid
   - **D** none of the above

7. **Life on Earth is not based on liquid ammonia because**
   - **A** there is no ammonia on Earth
   - **B** the earth is too warm a planet
   - **C** ammonia cannot dissolve substances as water does
   - **D** ammonia and water do not mix

8. **The form of life least likely to occur anywhere is**
   - **A** protein in ammonia
   - **B** protein in liquid sulfur
   - **C** silicones in liquid sulfur
   - **D** protein in water

What did the author mean?

9. **"In-Betweens" mentioned in the last paragraph would include**
   - **A** human beings only
   - **B** life on Earth only
   - **C** life on all earthlike planets
   - **D** all intelligent life

What is the author's attitude?

10. The author would be most greatly pleased to find that life on other planets is
- **A** similar to life forms on Earth
- **B** much like what he has predicted
- **C** exactly like life on Earth
- **D** unlike anything yet imagined

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. dismaying *(5)*
2. inhabitants *(5)*
3. outside the earth *(5)*
4. variety *(8)*
5. in a constantly changing manner *(10)*
6. extremely cold *(14)*
7. sharp; piercing *(15)*
8. drastic *(19)*
9. thoughts; conjectures *(19)*
10. effort *(19)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. deliberate *(4)*
    - **A** intentional
    - **B** slow
    - **C** careful

12. particular *(4)*
    - **A** fussy; careful
    - **B** specific; individual
    - **C** unusual; noteworthy

13. miserable *(5)*
    - **A** bad; poor; inadequate
    - **B** unpleasant; causing discomfort
    - **C** wretched; suffering

14. telling *(6)*
    - **A** revealing; making known
    - **B** counting; enumerating
    - **C** knowing; deciding

15. blind *(7)*
    - **A** hidden
    - **B** sightless
    - **C** unreasonable

C. The Latin words *stella* (star), *nebula* (cloud), and *luna* (moon) are **roots** for many English words. Usually they appear as *stell, nebul,* and *lun.*

Directions: The words in column II have the root *stell, nebul,* or *lun.* Write the word that best fits each definition in column I.

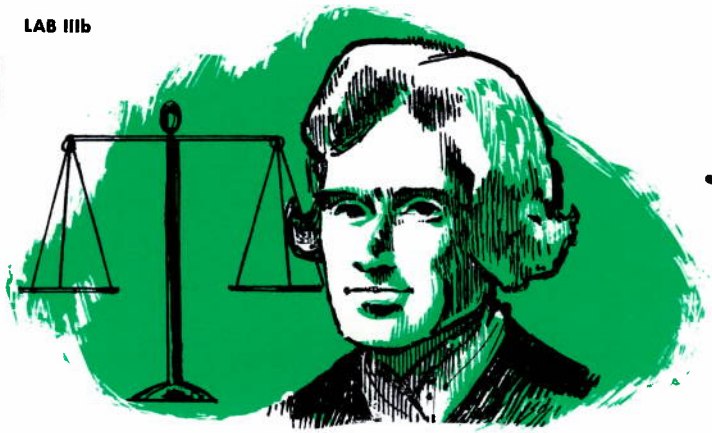
I	II
16. star-shaped	lunisolar
17. madness	nebulous
18. vague; misty	lunar
19. of the stars	stelliform
20. moon dweller	lunatic
21. crescent-shaped opening	lunarian
22. involving sun and moon	lunette
23. madman	stellar
24. of the moon	lunacy

D. Synonyms are words that have the same or nearly the same meaning. **Antonyms** are words that have opposite or nearly opposite meanings.

Directions: In each line in column I, find the two words that are related as synonyms. Then find their antonym in column II and write it.

I	II
25. certain, positive, objective	boredom
26. hidden, dispersed, scattered	genuine
27. contemplate, hope, consider	lowered
28. superficial, supposed, surface	basic
29. small, single, solitary	ignore
30. alien, amiable, foreign	dubious
31. elevated, removed, raised	concentrated
32. simulated, inferior, artificial	multiple
33. favor, interest, fascination	familiar

5



Jefferson Today

by Saul K. Padover

AMERICA'S PHILOSOPHER OF DEMOCRACY MAY SHAPE NEW NATIONS

1 Thomas Jefferson, who died in 1826, looms ever larger as a figure of special significance. Americans, of course, are familiar with Jefferson as an early statesman, author of the Declaration of Independence, and a high-ranking presidential Founding Father. But there is another Jefferson less well known. This is the Jefferson who, as the outstanding American philosopher of democracy, has an increasing appeal to the world's newly emerging peoples.

2 Of all the ideas and beliefs that make up the political philosophy known as Jeffersonian democracy, perhaps three are paramount. These are the idea of equality, the idea of freedom, and the idea of the people's control over government. Underlying the whole, and serving as a major premise, is confidence in humanity.

3 To Jefferson, it was virtually axiomatic that the human being was essentially good, and capable of constant improvement through education and reason. He believed that "no definite limit could be assigned" to a person's continued progress from ignorance and superstition to enlightenment and happiness. Unless this is kept in mind, Jefferson cannot be understood properly.

4 What did he mean by the concept of equality, which he stated as a "self-evident" truth? Obviously, he was not foolish enough to believe that all individuals are equal in size or intelligence or talents or moral development. He never said that individuals are equal, but only that they come into the world with "equal rights." He believed that equality was a political rather than a biological or psychological or economic conception. It was a gift acquired automatically by coming into the world as a member of the human community.

5 Intertwined with equality was the concept of freedom, also viewed by Jefferson as a "natural right." In the Declaration of Independence he stated it as "self-evident" that liberty was one of the "inherent" and "unalienable rights" endowed by the Creator. "Freedom," he summed up at one time, "is the gift of Nature."

6 What did Jefferson mean by freedom and why was it necessary for him to claim it as an "inherent" or "natural" right? In Jeffersonian thought there are two main elements in the idea of freedom. There is, first, people's liberty to organize their own political institutions and to select periodically the individuals to run them. This is political freedom. The other freedom is personal. Foremost in the area of individual liberty, Jefferson believed, was the untrammeled right to say, think, write, and believe whatever the citizen wishes—provided, of course, one does not directly injure one's neighbors.

7 It is because political and personal freedom are potentially in conflict that Jefferson, in order to make both secure, felt the need to found them on "natural right." If each liberty derives from an "inherent" right, then neither could justly undermine the other. Experience of the past, when governments were either too strong for the ruled or too weak to rule them, convinced Jefferson of

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the desirability of establishing a delicate natural balance between political power and personal rights.

8 This brings us to the third basic element in the Jeffersonian idea: the people's control over government. It is paradoxical that Jefferson, who spent most of his adult years in politics, had an ingrained distrust of government as such. For the then-existing governments of Europe, virtually all of them hereditary monarchies, he had antipathy mixed with contempt. His mistrust of strong and unchecked government was inveterate. "I am not," he said, "a friend to a very energetic government. It is always oppressive."

9 Government being a necessity for civilized existence, the question was how it could be prevented from following its tendency to swallow the rights of the people. Jefferson's answer to this ancient dilemma was at variance with much traditional thinking. He began with the postulate that government existed for the people, and not vice versa; that it had no independent being except as an instrument of the people; and that it had no legitimate justification for existence except to serve the people.

10 From this it followed, in Jefferson's view, that only the people, and not their rulers or the privileged classes, could and should be relied upon as the "safe depositories" of political liberty. This key idea in the Jeffersonian political universe rested on the monumental assumption that the people at large had the wisdom, the capability, and the knowledge exclusively to carry the burden of political power and responsibility. The assumption was, of course, widely challenged and vigorously denied in Jefferson's day, but he always asserted his confidence in it.

11 Confidence in the people, however, was not enough, by itself, to serve as a safeguard against the potential dangers inherent in political power. The people might become corrupted or demoralized or indifferent.

12 In order to put limits on power, Jefferson felt, it was best to divide it by scattering its functions among as many entities as possible—among states, counties, and municipalities. In order to keep it in check, it was to be impartially balanced among legislative, executive, and judicial branches. Thus, no group, agency, or entity would be able legitimately to acquire sufficient power for abuse. This is, of course, the theory that is embedded in the Constitution and that underlies the American federal system with its "checks and balances."

13 For the control of power or, more specifically, the governmental apparatus itself, other devices had to be brought into play. Of these, two are of special importance: suffrage and elections.

14 Unlike many contemporaries, Jefferson believed in virtually universal suffrage. His opinion was that the universal right to vote was the only "rational and peaceable instrument" of a free government.

15 Next to the right to vote, the system of free elections was the foremost instrument for control over government. This involved, first, the election by the people of practically all high government officials, and, secondly, fixed and regular periods of polling, established by law.

16 To make doubly sure that this mechanism would work as an effective control over power, Jefferson advocated frequent elections and short terms of office, so that the citizens would be enabled to express their "approbation or rejection" as soon as possible.

17 So this, in substance, is the Jeffersonian philosophy—faith in the idea of equality, of freedom, and in the right to and need for popular control over government.

18 What, in all this, is relevant to peoples without a democratic tradition, especially those who have recently emerged in Asia and Africa? The rejection of democratic procedures by some of these peoples has been disheartening to believers in freedom and democracy. But it is noteworthy that democratic and parliamentary government has been displaced in areas where the people had no background in freedom or self-rule, and where illiteracy is generally high. Even there it is significant that the new dictatorships are usually proclaimed in the name of the people.

19 The Jeffersonian assumption that men crave equality and freedom has not been denied by events. Special conditions and traditions may explain nondemocratic political methods for the achievement of certain purposes, but these remain unstable wherever the notion of liberty has begun to gain ground. "The disease of liberty," Jefferson said, "is catching."

20 The proof of this is to be found even in such societies as the Spanish and the Islamic, with their

ancient traditions of chieftainships where popular eruptions against dictatorial rule have had an almost tidal constancy. And, as for Communist dictatorships, they have not even begun to solve the question of freedom. In the long run, no people, West or East, can escape the Jefferson idea.

21 But it is a slow process, as Jefferson well knew. "The ground of liberty," he said, "is to be gained by inches; we must be contented to secure what we can get, from time to time, and eternally press forward for what is yet to get. It takes time to persuade the people to do even what is for their own good."

22 Does Jefferson survive? Indeed he does.

HOW WELL DID YOU READ?

Did you understand the main points?

1. **Jefferson's importance to newly emerging nations lies primarily in his**
   - **A** skepticism about established governments
   - **B** practical view of politics
   - **C** philosophy of government
   - **D** experience as President of the United States

2. **The basic assumption in Jefferson's philosophy was that**
   - **A** all people are born equal
   - **B** all people are good and can improve
   - **C** people exist to serve government
   - **D** both **B** and **C**

Did you grasp the specific ideas?

3. **Jefferson believed that political freedom and personal freedom are rights that**
   - **A** seldom conflict
   - **B** are inborn in a person
   - **C** both **A** and **B**
   - **D** neither **A** nor **B**

4. **Jefferson looked upon government as**
   - **A** an inherent right
   - **B** an earned privilege
   - **C** a useless invention
   - **D** a necessary evil

5. **Jefferson believed that ordinary people**
   - **A** always govern themselves wisely
   - **B** might become corrupt or indifferent
   - **C** cannot handle political responsibility
   - **D** must accept privileged classes

6. **Jefferson held that the best way to prevent the abuse of power was to**
   - **A** give it to a strong central government
   - **B** scatter it among many agencies
   - **C** entrust it to a few superior leaders
   - **D** both **A** and **C**

7. **Jefferson used the phrase "the disease of liberty" to suggest that**
   - **A** too much liberty can be dangerous
   - **B** people exposed to liberty usually catch it
   - **C** liberty is not a natural thing for man
   - **D** the desire for liberty can be eradicated

Did you see the implications?

8. **The fact that many new dictatorships are proclaimed in the name of the people shows that**
   - **A** a new kind of democracy is emerging
   - **B** democratic dictatorships are possible
   - **C** the dictatorships are weak
   - **D** democracy is an instinctive urge

9. **The author asks how much of Jefferson's thought is relevant today, and answers**
   - **A** possibly all
   - **B** only that applying to freedom
   - **C** only that applying to control of power
   - **D** no one knows

10. **The author believes that Jefferson's ideas**
    - **A** are applied in most new nations
    - **B** will eventually take hold in all newly emerging nations
    - **C** will need to be modified in the future
    - **D** will become less necessary in time

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. supreme; dominant *(2)*
2. self-evident *(3)*
3. unrestrained *(6)*
4. seemingly contradictory *(8)*
5. strong dislike *(8)*
6. long-standing *(8)*
7. predicament *(9)*
8. right to vote *(13)*
9. recommended *(16)*
10. approval *(16)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. **essentially** *(3)*
    - **A** necessarily
    - **B** absolutely
    - **C** basically

12. **delicate** *(7)*
    - **A** slight and subtle
    - **B** pleasingly refined
    - **C** fine in texture

13. **unchecked** *(8)*
    - **A** unsupervised
    - **B** untested
    - **C** unrestrained

14. **indifferent** *(11)*
    - **A** neutral; impartial
    - **B** uninterested; apathetic
    - **C** average; ordinary

15. **popular** *(20)*
    - **A** pertaining to all the people
    - **B** common; prevalent
    - **C** well-liked; widely liked

C. *mania* (madness for)
phobia (dread of; hatred for)
algia (pain)
itis (inflammation)

A knowledge of these **suffixes** and combining forms will provide you with a key to the meaning of many unfamiliar words.

Directions: Use *-mania, -phobia, -algia,* or *-itis* to complete each word so that it fits the definition. Write the word.

16. photo____(aversion to light)
17. neur____(inflammation of a nerve)
18. mono____(excessive interest in one thing)
19. appendic____(inflammation of the appendix)
20. ego____(abnormally excessive love of the self)
21. laryng____(disease identified by hoarseness)
22. nost____(homesickness)
23. phobo____(fear of one's own fears)
24. neur____(pain in a nerve)
25. claustro____(fear of being closed in)

D. Figures of speech used to make language richer and more vivid. Two devices that are often used to lend color to language are **onomatopoeia** and **alliteration.** Onomatopiea is the use of words whose sounds resemble those associated with the object or action named:

The *puff-puff* of the engine . . .
Wind *whooshed* through the hall.

Alliteration is the use, in a phrase or sentence, of neighboring syllables beginning with the same letter or sound:

Desperate deeds of derring do . . .

Alliteration can result in a sound effect that enhances the meaning of the line.

Directions: Each quotation below contains either onomatopoeia or alliteration. Write **O** or **A.**

26. "An Austrian army, awfully arrayed"
27. "The silvery tinkling of shattering glass"
28. "And far away the booming of the guns"
29. "Dr Williams' pink pills for pale people"
30. "The crackle and rustle of dry leaves"
31. "A deep but dazzling darkness"
32. "The moan of doves in immemorial elms"
33. "Boldly by battery besieged Belgrade"

6

Counterfeiting: Once Money, Now Everything

by James R. Chiles

1 In December 1984, inspector Karen Johnson of the U.S. Customs Service was examining the boxes of Asian-manufactured toys at an importer's business in the Los Angeles area. "It had a cute body," she remembers, one very similar to those on the popular Cabbage Patch models. "But the head was a sock. Somebody had taken a black marker pen and drawn a mouth, nose, and eyes." Noticing thousands like it, she asked the importer whether he intended to sell anything so crude.

2 He said yes, but he didn't add that he was planning to decapitate the dolls and add fake Cabbage Patch heads later. What Johnson saw was a small part of a very big business. From that December through the following July, with the help of the copyright owner, informants, and other federal agencies, Customs seized 263,000 counterfeit Cabbage Patch dolls in Southern California alone.

3 *Counterfeit:* To most of us the word means a basement press churning out crisp sheets of Benjamin Franklin bills, but in this country bogus currency ($90 million seized or passed in 1984) is peanuts compared with what counterfeit goods bring (1984 figures range from $15 to $18 billion). The phony products might include the shampoo in your bathroom, the brake linings in your automobile, sunglasses, shoes, credit cards, or cashmere for overcoats: none has been immune from illegal copying.

4 Three lines of defense protect this country from counterfeit goods: U.S. Customs, the legal system, and new technologies that can help separate genuine from junk.

5 Customs, the first line of defense, has tasted success. Nationwide it seized more than $35 million worth of bogus goods in 1985, but even by a long stretch of the imagination, Customs couldn't solve America's counterfeit problem. Of the 1.5 million containers that entered the Los Angeles-area ports last year, Customs was able to thoroughly search only 2 to 5 percent, explains Alan Walls, special agent in charge at Los Angeles. Even with those containers that do get the inspector's scrutiny, counterfeiters don't take first priority. Each inspector wears hundreds of hats: watching for agricultural fungi and pests, challenging import classifications that attempt to sneak products into the country without payment of duties, and looking for contraband weapons and narcotics.

6 There has always been some attempt to curb counterfeiters, but only recently (probably because of the huge influx of items from Third-World countries, particularly the Far East) has such a great effort been made. Some manufacturers pay Tony Gurka and his agents to keep an eye on the Far East—before the problems arrive at U.S. Customs. Gurka heads up Commercial Trademark Services of Hong Kong and maintains offices throughout the area. The colony alone has seventy-six employees—twenty-five of these are investigators who visit an average of five establishments daily. "All of our investigators are local," he explains in a confidential tone. "Ninety-six percent are recruited for a particular industry. We don't use ex-policemen. Why? One, they must have

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knowledge of the product and the trading business. Policemen don't have this knowledge. And two, they've learned bad habits in the Far East. They're often corrupt."

7 Counterfeit clothes confiscated after raids in the Philippines may end up back on the market if the police aren't bribed. At the same convention where I met Tony Gurka, a trademark attorney told of the trial of a shoe counterfeiter in Thailand; following the sentencing, the judge passed a note to the defense attorney asking to buy a dozen pairs for his relatives.

8 Inside the United States, counterfeits bring forward the second line of defense: the American legal system. Under a federal law called the Trademark Counterfeiting Act of 1984, wrongdoers can go to jail for up to five years and pay fines of up to $250,000 for a first offense, plus damages of three times the profits involved. The system also sets the rules for how trademark owners can get court orders to raid counterfeiters. Because the raids are an invasion of privacy and usually allow reasonable force, judges insist that all the legal formalities be observed.

9 In fact, it's so difficult and expensive to enforce trademark and copyright laws against counterfeiters that the legal system has come to depend on assistance from the trademark owners and their hired help. In the past few years, courts have appointed lawyers as temporary U.S. Marshalls and temporary government prosecutors. Accompanied by police officers, private detectives and lawyers make unannounced raids on counterfeit operations.

10 Probably the premier counterfeit detective on the West Coast is Bill Ellis who runs a company called National Sales Audit. Ellis and ten employees devote themselves exclusively to counterfeits. A favorite tactic in important cases is gradually to place three detectives into a counterfeiter's clientele over a period of months. The third, or last, detective in then makes a purchase and goes public to testify in court, usually bringing a permanent restraining order never to sell those fakes again. If the counterfeiter persists, then the second detective makes a buy and testifies in court for a second complaint. That brings a contempt-of-court citation, and, if the counterfeiter ignores that and sells to the first detective, a contempt-of-contempt citation. That's usually the only way a counterfeiter will end up in jail because most prosecutors don't want to spend the time to press for prison sentences under the counterfeiting laws. Usually the trademark owner settles out of court.

11 Two lawyers have obtained court orders for Adidas USA and the Walt Disney Company to raid four businesses known to be counterfeiting their T-shirts. By mid-morning on a Thursday the raiders have gathered in a Los Angeles café: ten men in all.

12 During the raid I learn that a counterfeit seizure is a cross between a narcotics raid and an Easter egg hunt. It's serious business, and everyone appears grateful to have deputies along if resistance develops. This time, like most times, the raiders walk right in and the owners offer no trouble—only embarrassment. Quickly the raiders strip the shelves of the contraband covered by the court order, and, within twenty minutes, the T-shirts are piled in the raiders' truck. After hurriedly riffling through check stubs and sales slips, the raiders depart, leaving the proprietor with a stack of legal documents and a receipt.

13 Some companies hope to stem counterfeiting by throwing technology (the third line of defense) at it, rather than additional lawyers and detectives. The companies sell certificates and labels that make it possible to determine whether an article is genuine. Some tags for use by anticounterfeiting specialists require special instruments to verify them. Other tags require only a glance; these are intended to tip off potential buyers before they part with their money.

14 The conventional war, however, still continues. It's five o'clock on a Thursday in November. Bill Ellis with a group of T-shirt raiders has pulled up on a sidewalk on Jefferson Boulevard in south Los Angeles. They've decided to postpone this raid until the following morning because the target closed up early and they couldn't get a police officer in time. Attorney Craig Correll and Ellis spend a few minutes exchanging stories about murders among counterfeiters and informants. Then Correll turns to me and states his philosophy. "I see this—what's happening to designer-clothing companies—as what might happen to all trademarks," he says. "Now it's mostly T-shirts and clothing, but eventually you get to a point where, if you can't take a defective shirt back and get a refund, or if a tape breaks and gums up your

stereo and you can't do anything, or a brake lining fails, or this thing with pharmaceuticals . . . well, at some point we're going to go into a grocery store and look at a can of Campbell's soup and wonder if that's what's really inside."

15 The men disperse to their autos and trucks, frustrated at being unable to pull off the raid, but they'll be back tomorrow—with the police.

HOW WELL DID YOU READ?

Can you draw the right conclusions?

1. Compared to the counterfeiting of money, the counterfeiting of goods is

A big business
B small potatoes
C a mere trifle
D nonexistent

2. According to the article, which phrase best describes what goods are counterfeited?

A Nearly all goods, or a part of them, manufactured anywhere in the world
B Only the goods made inside the U.S.
C Mostly those goods purchased by wealthy, sophisticated consumers in the English-speaking parts of the world
D Mostly appliances and equipment

3. If what is true of U.S. Customs in Los Angeles is true throughout the United States, then what percentage of containers entering the country cannot be searched by Customs?

A About 5%
B About 50%
C About 85%
D About 95%

4. Which of these would Tony Gurka most likely hire to investigate a tool-and-die manufacturer?

A A former police officer with a knowledge of cars
B A former toy salesperson with mechanical aptitude
C A former automobile engineer with international sales experience
D A former commodities broker who specialized in tin and aluminum

5. A counterfeiter of designer jeans is convicted of making a $250,000 profit. Which of these would be the maximum penalty?

A 3 years in jail, a fine of $25,000, and $75,000 in damages
B 5 years in jail, a fine of $250,000, and $750,000 in damages
C 7 years in jail, a fine of $250,000, and $750,000 in damages
D 25 years in jail, a fine of $750,000, and $250,000 in damages

6. To which of these would a U.S. Customs agent probably give first priority?

A Plants and flowers imported from Holland
B Designer jeans imported from Indonesia
C Perfumes and cosmetics imported from France
D Cameras imported from Japan

7. Based on the article, from which of these countries would the most counterfeit goods come?

A Mexico
B India
C Nigeria
D Taiwan

8. The article implies that if something isn't done soon about counterfeits, the public will

A lose confidence in the quality of all goods
B be bilked of billions of dollars
C stop buying, thereby causing major international economic problems
D become tolerant of underground markets

How carefully did you read?

9. Which of these is not mentioned as a defense against counterfeiting?

A The new technologies
B The U.S. Treasury Department
C The U.S. legal system
D The U. S. Customs

10. The second raid was canceled due to the

A lack of a court order
B illness of the author
C absence of a police officer
D inclement weather

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. persons who give information *(2)*
2. close examination *(5)*
3. flowing in *(6)*
4. taken and kept *(7)*
5. principal; first in importance *(10)*
6. group of customers *(10)*
7. illegal goods *(12)*
8. shuffling; looking quickly; leafing *(12)*
9. set of personal beliefs and attitudes *(14)*
10. scatter *(15)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits each word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. sock *(1)*
    - **A** knitted foot covering
    - **B** violent punch
    - **C** low-heeled shoe

12. crude *(1)*
    - **A** primitive; unrefined
    - **B** natural; unaltered
    - **C** obvious; lacking specificity

13. observed *(8)*
    - **A** taken note of
    - **B** remarked; commented
    - **C** practiced; followed

14. stubs *(12)*
    - **A** short, blunt pencils
    - **B** parts kept as a record
    - **C** stumps (as of trees)

15. glance *(13)*
    - **A** sudden movement
    - **B** rapid flash or gleam
    - **C** quick look

C. *dia* (through; throughout; across; apart; between)
peri (around; about; encircling; surrounding; near)

A knowledge of these **prefixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the prefix *dia-* or *peri-* to complete each word so that it fits the definition. Write the word.

16. _____patetic (walking about)
17. _____gonal (line between alternate angles of a square)
18. _____gee (point nearest the earth in the orbit of a satellite)
19. _____lects (ways of speaking found in different parts of a country)
20. _____log (speech between two people)
21. _____meter (outer boundary of a figure; distance around)
22. _____meter (width or thickness of a thing)
23. _____od (dot indicating end of a sentence)
24. _____helion (point nearest the sun in the orbit of a planet)

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says.

He is *behind the times.*

Behind the times is an idiom meaning "old-fashioned" or "dated."

Directions: The idioms in column II are built on the word *time.* Write the idiom that best fits each meaning in column I.

I	II
25. at intervals	ahead of time
26. sooner than due	one at a time
27. almost instantly	for the time being
28. for the present	from time to time
29. in turn; taking turns	in good time
30. exchange a few words	on one's own time
31. at the proper time	pass the time of day
32. again and again	time after time
33. during time for which one is not paid	in no time

7

SURPRISES AWAIT THOSE WHO EXPLORE...

Insect Life in WINTER

by E. Laurence Palmer

1 I am certain that I could locate today almost the precise spot in New York State where, as a youngster, I first saw a mourning cloak butterfly in the winter. It was a puzzling experience; when I first saw the butterfly I saw it quite distinctly, but by the time I reached the spot where it had been, it had vanished completely. While I was looking about in confusion, and in some disgust, the insect suddenly reappeared close at hand, having come to rest on the dark trunk of a tree, a setting in which it was virtually invisible. I realize now that I was quite fortunate to get even a second glimpse, for this butterfly can frequently conceal itself rather completely under a piece of loose bark.

2 Apparently, subzero temperatures do not curtail the activities of this butterfly, but it has been my experience that abundant sunlight does seem to have a stimulating effect; I have seen the butterfly more frequently in late winter than earlier in the season. To me the most remarkable thing about the mourning cloak is not the beauty of the creature but the almost perfect camouflage effected by the folding of its wings; the mourning cloak is almost black when it assumes this position.

3 The same woodland that shows you a mourning cloak may also provide geometrid moths. Those that you see in flight are males, probably seeking the wingless females that secrete themselves in the crevices of tree bark. The female crawls to the top of the tree to lay her eggs, which develop into the "measuring worms" that may plague you early in summer by falling on you. One of the best devices for controlling these nuisances is to put on the tree a band of sticky substance which will prevent the females from reaching the top.

4 In sugar maple country almost any mild winter's day will afford a plentiful number of honeybees that have come out to feed on the sugary sap that has oozed from some broken twig. A bee's life is an active one and, partially because of the drain on the stored honey by the wintering colony, it becomes necessary to replenish the stores whenever possible. How far bees travel from their home colony to get food in winter I have never been able to ascertain, but I have seen bees that must have been caught by an abrupt change in the weather, for they never made it home again; sometimes these casualties can even be found on the snow.

5 White cabbage butterflies, so abundant later in the season, may sometimes be observed in midwinter, because adults usually survive the winter successfully and respond rather readily to

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any suggestion that if winter comes spring cannot be far away, and when more temperate weather arrives they want to be the first on the job when any mustard plants show themselves. It is interesting to contemplate how successfully a white butterfly could use white snow as a camouflaging background, but it is difficult to imagine where the butterfly or its young could discover a meal at such a time.

6 The insects to be found hiding on or inside plants in winter are so numerous that I shall mention no more than a few; these should be so conspicuous that almost anyone could find them on a winter field trip. I suggest investigating some of the scale insects to be found on the twigs of woody plants; these are representative of insects that live on bark in winter. Seek out a borer such as the engraver beetle, which lives under bark in the winter, but whose presence can be detected; find some insects that create a change that can be recognized at a considerable distance in herbaceous plants, as is the case with the work of cattail moths; or look for some insect-produced gall, such as the pinecone-shaped gall found at the tips of willow twigs in winter. As you seek these insects, you will probably discover others leading similar lives.

7 Almost any woody plant is likely to have some scale insects on it, but ash, apple, and dogwood are often spectacularly infested, so that your chance of having good luck may be increased if you examine these plants first. Usually, too, you will be more apt to find life if you examine finer twigs rather than the coarser parts of trees. Superficially, I admit, the glamour of a scale insect on a twig cannot compare with that of a mourning cloak butterfly fluttering through the woodland, but the scale insect does considerably more damage to our fruit trees, our timber trees, and our ornamental shrubs. Whether we like it or not, it behooves us to know more about the scale insect than about a winter butterfly or moth.

8 I doubt that there are many readers who, having built fires in the woods from fallen wood, have not discovered the work of engraver beetles of one sort or another. When the bark is peeled from such wood, the engraver beetle's work is usually left exposed; you can see the gouged-out trails left by the larvae that ate their way between the bark and wood as they grew in size. The burrow of a true engraver may have a common brood chamber—an enlarged space in the walls where the eggs were laid. From this central chamber the grubs worked their way outward. In some cases, the paths cross; our engraver beetles provide a story whose plot is intriguingly complex and challenging to unravel.

9 Let's consider some of the insects found in the house, apparently attempting to escape into the snowy landscape—virtually any winter window, late in the season, should provide good collecting if your quarry includes ladybird beetles, polistes wasps, cluster flies, or elm-leaf beetles. Attic windows are often the most rewarding.

10 One of the insects most commonly found on the ground or on the snow in winter is the woolly bear caterpillar, sought by some because of the belief that the length of the winter can be predicted from the percentage of black to be found on the caterpillar; however, this is sheer superstition. Woolly bear caterpillars, young and old, may live through the entire winter, and on a mild winter day may be seen moving across some bare, earthen space.

11 Near rapidly flowing streams in early spring the snow may be almost covered with adult stoneflies, which can fly but are not able to leap as some other winter insects do. They mate and make their way to some elevation, such as a fence post, from which they again take flight and return to the stream to lay their eggs.

12 On sunny, late-winter days the snow around the bases of some trees may be pocked with what appear to be little black specks. These "specks" may suddenly spring into the air, for they are springtails, or snowfleas—among the most primitive of insects.

13 Obviously, the expression "dead of winter" needs to be qualified at times. Consider the insects seen flying in the air over snow-covered ground; insects discoverable on and in plants; insects observed crawling over bare ground while snow is still abundant; insects seen in dwellings trying to escape to the snow-covered outdoors; insects to be found in and on the snow itself. The winter of the year is never completely dead, for there are countless members of the insect family that continue their work through the cold, snowy months.

HOW WELL DID YOU READ?

What did you learn?

1. **The writer first became interested in insect life**
   - **A** a few years ago
   - **B** in his childhood
   - **C** when he saw his first mourning cloak butterfly
   - **D** when he began to study the bee

2. **Measuring worms leave the treetops by**
   - **A** crawling down the trunk
   - **B** being carried by the mother
   - **C** flying as soon as their wings are developed
   - **D** falling to the ground

3. **The author says that scale insects should be studied because they are**
   - **A** destructive
   - **B** relatively unknown
   - **C** interesting
   - **D** beautiful

4. **Among the insects that leave obvious traces of their work are the**
   - **A** stoneflies
   - **B** engraver beetles
   - **C** measuring worms
   - **D** cabbage butterflies

Can you put facts together?

5. **The mourning cloak butterfly probably got its name from**
   - **A** its camouflaging technique
   - **B** the fact that it is not beautiful
   - **C** its odd behavior
   - **D** its brief lifespan

6. **The color of the woolly bear caterpillar is**
   - **A** black mixed with some other color
   - **B** black only
   - **C** white only
   - **D** not given in the article

7. **A sticky band placed round a tree trunk controls the geometrid moth by preventing the**
   - **A** female from climbing the tree
   - **B** grubs from climbing the tree
   - **C** grubs from leaving the tree
   - **D** males from reaching the treetop

8. **You are likely to find insects in winter**
   - **A** outside windows, trying to get in
   - **B** inside windows, trying to get out
   - **C** near windows, trying to warm themselves
   - **D** away from windows, avoiding the sun

Did you see the point?

9. **The writer thinks that the expression "dead of winter" needs to be qualified because it is**
   - **A** misleading
   - **B** usually accurate
   - **C** depressing
   - **D** meaningless

Did you sense the writer's tone?

10. **The writer presents facts about insects as if he were**
    - **A** conversing with other naturalists
    - **B** browsing through books on this subject
    - **C** advising amateurs about a field trip
    - **D** making notes for a textbook

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. brief view *(1)*
2. cut down; decrease *(2)*
3. protective disguise *(2)*
4. make full again *(4)*
5. find out *(4)*
6. noticeable; obvious *(6)*

7. on the surface *(7)*
8. is fitting for *(7)*
9. in an interesting manner *(8)*
10. marked with tiny spots *(12)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. casualties *(4)*
    A accidents
    B injured
    C dead

12. temperate *(5)*
    A restrained
    B not too hot or cold
    C moderate in behavior

13. common *(8)*
    A ordinary
    B shared by many
    C widespread

14. sheer *(10)*
    A downright
    B steep
    C transparent

15. qualified *(13)*
    A competent
    B modified
    C legally capable

C. The **suffixes** *-fy* and *-en* both mean "to make." Usually only one of these suffixes can be used with a particular word.

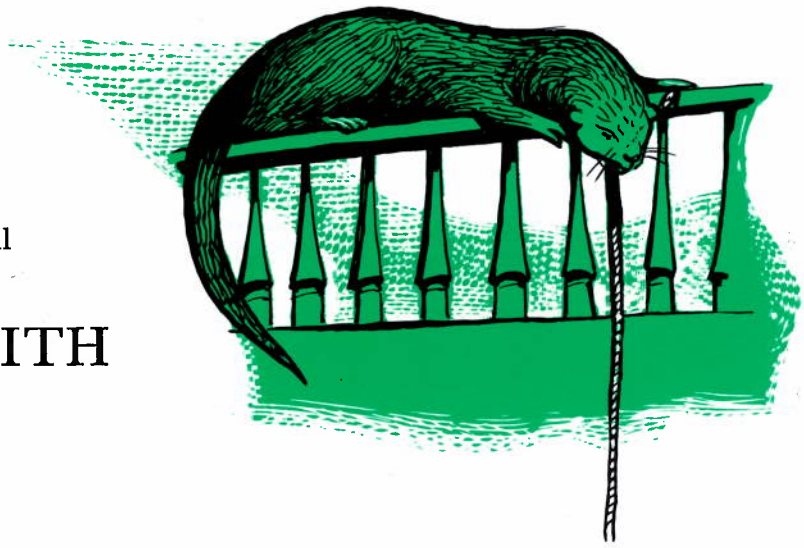
Directions: Decide which suffix goes with each word part. Add the suffix and write the word.

16. quick___
17. petri___
18. enliv___
19. short___
20. dei___
21. glori___
22. horri___
23. height___
24. dark___
25. lique___

D. Figures of speech are used to make language richer and more vivid. But a figure of speech wrongly used or badly constructed will detract from rather than add to speech and writing. One common error is the **mixed metaphor**—a comparison that is inconsistent in some way. "He is the weakest link in the strong arm of the law" is a mixed metaphor, because it forces the reader to form two different mental pictures at the same time.

Directions: Each quotation contains a metaphor. If the metaphor is mixed, write *mixed*; if it is not, write *valid.*

26. "Keep your nose to the grindstone and your ear to the ground."
27. "Was it the proud full sail of his great verse . . . that did my ripe thoughts in my brain inhearse . . ."
28. "A stitch in time may keep your project from sinking."
29. "It is a sad thing . . . to be murdered by the hand which is sworn to keep an eye on your welfare."
30. "A monarchy is a merchantman that sails well, but will sometimes strike a rock and go to the bottom."
31. "Tall oaks from little acorns grow."
32. "They're always biting the hand that lays the golden egg."
33. "For there is an upstart crow, beautified with our feathers, that with tiger's heart wrapped in a player's hide . . ."



by Gavin Maxwell

MY LIFE WITH *MIJ*

1 Since I adopted an otter for a pet, life has never been the same.

2 I have never been able, since he and I came together, to make up my mind whether certain aspects of otter behavior merely chance to resemble that of human beings or whether, in the case of animals as young as Mij was, there is actual mimicry of the human foster parents. Be that as it may, Mij always seemed to scrutinize me as I composed myself on my back with a cushion under my head; then, with an air of knowing exactly what to do, he would clamber up beside me and work his way down into the sleeping bag until he lay flat on his back inside it with his head on the cushion beside mine and his forepaws dangling. In this position, an attitude such as a child might arrange for his teddy bear in bed, Mij heaved an enormous sigh and was instantly asleep.

3 A dry otter at play is an animal that might have been specifically designed to captivate a child. Otters look like invented animals, a thought that has instantly occurred to many people upon first encountering my Mij, with his short legs, tubby, furry torso, vast whiskers, and clownish good humor. In the water, otters take on a quite different aspect and personality, becoming supple as eels, quick as lightning, and graceful as ballet dancers, but few people have observed them for long below the surface, and I have yet to see a zoo that gives its otters a glass-sided tank. Their underwater cavorting would be a spectacle, I believe, to steal the show from the whole aquarium.

4 Mij and I were in London for nearly a month, during which, as my landlord put it, the studio came to look like a cross between a monkey house and a furniture repository. The garage roof was fenced in, and a wire gate was fitted to the gallery stairs, so that occasionally Mij could be excluded from my studio itself. The upstairs telephone was enclosed in a box (the fastening of which he early learned to undo); my dressing table was separated from him by a wire flap hanging from the ceiling, and the electric light wires were

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enclosed in tunnels of hardboard that gave the premises the appearance of a powerhouse. All these precautions were absolutely essential, for if Mij thought he had been excluded too long, especially from visitors whose acquaintance he wished to make, he would begin laying waste with extraordinary invention. No amount of forethought that I could muster ever was able to forestall his genius. There was always something I had overlooked, something that could be made to express with a crash his mood of frustration, and it did not take me long to learn that prevention was more convenient than restoration.

5 There was nothing haphazard about the demonstrations he planned; into them went all the patience and ingenuity of his remarkable brain and all the agility of his muscular little body. One evening, for example, after the contractors had departed for the third or fourth time, leaving what I thought to be an otterproof situation at last, I had confined Mij to the gallery for an hour in deference to the wishes of my female visitor, who feared for her nylons. He appeared, after a few minutes, balancing adroitly on the gallery railing, paying no attention either to us or to the formidable drop below him, for his plan was already perfected. At various points along the railing were suspended certain decorative objects—a shepherd's bag and a dagger, among other things. Purposefully, with an air of enormous self-satisfaction, Mij began chewing through the cords by which each of these objects hung. After each chewing-through he would pause to watch his victim crash to the floor below; then he would carefully resume his precarious, straddling progress along the rail until he reached the next. We stood, my visitor and I, waiting to catch the more fragile items as they fell, and when the last one had fallen she turned to me and said with a sigh, "Don't you ever feel that this just can't go on?"

6 His more usual games were adequate for perhaps half the time he spent indoors and awake, but several times a day he needed, as much psychologically as physically, I think, a prolonged romp with a human playmate. Tunneling under the carpet and affecting to believe himself thus rendered invisible, he would shoot out with a squawk of triumph if a foot passed within range; or he would dive inside the loose cover of the sofa and play tigers from behind it. Sometimes he would lay siege to one's person by launching a series of tip-and-run raids. It was the "tip" that was the trouble, for his teeth were like needles, and such games would end with a certain amount of visible proof of his success left on the human hand. It did not hurt, but it made a bad impression upon visitors, many of whom were ready in any case to accord him the distrust appropriate to an alien upstart.

7 At night he slept in my bed, still on his back with his head on my pillow, and in the morning he shared my bath—with utter indifference to temperature he would plunge ahead of me into water still too hot for me to enter, and while I shaved he would swim around me, playing with the soapsuds or with the various celluloid and rubber ducks that had begun to accumulate in my bathroom as they do in a child's.

8 Outside the house I exercised him on a leash, precisely as one would a dog, and like a dog he soon showed preference for certain streets and certain corners, picking up the intriguing scents of other animals.

9 As may be imagined, Mij caused no small stir during these walks. I suppose it is not in any way strange that the average Londoner should fail to recognize an otter, but the variety of guesses as to what kind of animal this might be came as no less of a surprise to me than the consistent near-accuracy with which a few persons came close to guessing his identity without quite doing it. Otters belong to a comparatively small group of animals called mustelines, a classification shared by the badger, mongoose, weasel, polecat, marten, mink, and others. In the London streets I faced a continual barrage of guesses that encompassed the entire musteline family—except the otter. Wilder, more random conjectures included everything from a baby seal to a squirrel. Mij was called a walrus, a hippo, a beaver, a bear cub, a newt, a leopard (apparently one that had changed its spots), and a brontosaur.

10 But the question for which I awarded the highest score—a question evading with contemptuous dexterity any possible inaccuracy on the part of the speaker; putting the blame for Mij's unfamiliarity squarely on my own shoulders; hinting that someone had blundered, and containing an accusation of unfinished work unfit

for exhibition—came from a Herculean laborer, mightily and solitarily engaged in digging a hole in the street. I was still far from him when he laid down his pick, put his hands on his hips, and began to stare. As I drew nearer, I beheld that his stare held a sort of outraged quality, one of surprise, but also of indignation, as if he would have me know that he was not one upon whom to play jokes.

11 I came abreast of him. He spat, glared, and then growled out: "'Ere, mister—what is that supposed to be?"

HOW WELL DID YOU READ?

How well do you reason?

1. **The quality of the otter that appealed most to the author was its**
   - **A** loyalty
   - **B** affectionate, fun-loving nature
   - **C** ability to attract attention
   - **D** skill in swimming

2. **Most of Mij's destructiveness was prompted by his**
   - **A** natural need for constant activity
   - **B** desire for attention from the author
   - **C** dislike for the author
   - **D** both **A** and **B**

3. **The otter's short, tubby body is**
   - **A** a handicap to his movements on land
   - **B** a handicap to his movements in water
   - **C** both **A** and **B**
   - **D** neither **A** nor **B**

4. **If the author were a zookeeper, he would be likely to**
   - **A** keep the animals strictly confined
   - **B** let the animals live as freely as possible
   - **C** teach the animals difficult tricks
   - **D** spoil the animals unnecessarily

5. **The author's approach toward life with an animal is probably that**
   - **A** a wild creature must be confined in separate quarters
   - **B** all pets should learn habits that please their owners
   - **C** a pet's every whim must be recognized and catered to
   - **D** owner and pet must learn to adapt to each other

Did you notice the comparison?

6. **The author compared Mij to**
   - **A** a teddy bear that could move
   - **B** a leopard that had no spots
   - **C** a child that enjoyed toys
   - **D** an eel out of the water

Can you evaluate the evidence?

The story gives evidence that various persons mentioned held differing attitudes toward the author and his pet. Decide which attitude is representative of which person. Write *lady visitor, visitors, landlord,* or *laborer.*

7. The author could not keep the otter much longer.
8. The author was somehow offensive for keeping an otter.
9. The otter was not to be trusted and made a poor pet.
10. The otter was creating havoc in the author's apartment.

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. imitation *(2)*
2. trunk of body *(3)*

3. easily bent; flexible *(3)*
4. place where things are stored *(4)*
5. purposely shut out *(4)*
6. accidental *(5)*
7. cleverness in inventing *(5)*
8. regard; consideration *(5)*
9. expertly *(5)*
10. constant; uniform *(9)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. composed *(2)*
    A constructed
    B settled
    C calmed

12. air *(2)*
    A tune
    B manner
    C atmosphere

13. attitude *(2)*
    A manner of acting
    B opinion
    C posture

14. contractors *(5)*
    A parties to a contract
    B muscles that serve to contract
    C suppliers of materials and labor

15. perfected *(5)*
    A flawless
    B unqualified
    C complete

C. The Latin word *tempus* and the Greek word *chronos* both mean "time." They are **roots** for many English words, appearing as *temp* and *chron.*

Directions: The words in column II have the root *temp* or *chron.* Write the word that best fits each definition in column I.

I	II
16. speed	tempest
17. in order of occurrence	chronometer
18. period of bad weather	tempo
19. measurement of time	chronological
20. unpremeditated; not prepared ahead of time	temporary
21. lasting a long time	chronometry
22. of this world; of, or limited by, time	extemporaneous
23. not permanent; for a time	chronic
24. device for measuring time	temporal

D. Synonyms are words that have the same or nearly the same meaning. **Antonyms** are words that have opposite or nearly opposite meanings.

Directions: For each word in column I, find a synonym or antonym in column II and write it.

I	II
25. adopted	inflexible
26. mimicry	arrive
27. supple	aspect
28. graceful	planned
29. appearance	imitation
30. extraordinary	ungracious
31. haphazard	relatively
32. comparatively	disowned
33. outraged	infuriated
	unexceptional
	clumsy
	adapted

GREEN LAB IIIb

9

Fat Facts to Fascinate

by Gina Kolata

1 As millions of people attempt again and again to lose weight, medical researchers are beginning to uncover the mystery of why some people are overweight and what can be done about it. Some scientific evidence is presently suggesting, for example, that the signals to overeat may emanate from the fat cells themselves. Some formerly obese people, who have large numbers of fat cells, may actually be in a state of starvation, as far as their fat cells are concerned. The recent obesity research cannot yet promise cures for overeating or being overweight, but medical scientists are convinced that the study of the biochemical basis of obesity at least has the potential for leading to an eventual treatment.

2 For years, it was widely believed that obesity resulted from an emotional disorder and that people were overweight—according to this psychogenic theory—because they used food to relieve anxiety and depression. Then, of course, their obesity made them even more anxious and depressed, so they ended up consuming more. This vicious cycle got started early in life when they were either deprived of the food or oral gratification they needed or were provided with too much food, as a reward or to comfort them. Gradually, however, a very different theory has emerged. As researchers studied how animals regulate their body weight and started to look at the biochemistry of obesity, they began to suspect that the emotional disorders so closely connected to obesity are the result, rather than the determinant of obesity. In fact, they may be partially the result of attempting to control obesity by dieting.

3 The change of direction in obesity research began when investigators came to appreciate the significance of an observation that has been made by scores of

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scientists over a period of decades: most animals seem to have stable weights. If they are provided all they want to eat, they maintain a consistent weight. If they are deprived of sustenance or force-fed, they lose or gain weight, but when they are permitted to eat naturally again, their weight returns to its original level.

4 Such experiments raised new questions: How do animals maintain their weight? And if maintaining a stable weight is so natural, why do so many people have such difficulty with it? Thirty-four million Americans are at least 20 percent above their ideal weights—the usual definition of obesity—and the recidivism rate in obesity treatments is estimated at two-thirds. It is as high as 95 percent for the morbidly obese who are 100 pounds or 100 percent above their ideal weights.

5 At Rockefeller University, obesity researchers Jules Hirsch, Irving Faust, and Rudolph Leibel believe an animal's—or a person's—stable weight, sometimes called its set point, has something to do with the fat cells in its body. The signals to overeat, they conclude, may originate in the fat cells themselves. The number of fat cells in an animal's body is not necessarily fixed, explains Faust, although once people or animals acquire fat cells they never lose them. However, what does seem to be closely regulated is how large the fat cells become. "We can push the fat-cell size in any animal to a bare minimum by depriving it of food. Knowing this, it is interesting to observe that if you leave an animal or a person alone, the fat cells will stay constant in size. It suggests to us that there is some sort of regulation in effect. We feel that there are signals between the fat tissue and the central nervous system." Since obese people tend to have fat cells that are two to two-and-a-half times larger than those of normal people, Faust and Hirsch hypothesize that the signals regulating fat-cell size may be perturbed in these people.

6 Faust's first test of the fat-cell hypothesis was to study rats that have twice as many fat cells as usual. These rates regulated their eating so that their fat cells were the same size as those of normal rats—but since they had twice as many fat cells, they were twice as fat.

7 Next, Faust removed fat from young rats so that they possessed only half the normal number of fat cells. These rats, too, ate just enough to keep their fat cells of normal size, but since they had only half as many fat cells as they normally would, they were only half as fat as their littermates.

8 The next step was to observe people. The volunteer Hirsch and Leibel used in the experiment was of normal weight for his height—about 190 pounds—and needed 2,850 calories a day to maintain his weight. Of these calories, 183 were used strictly to burn up the food he consumed. In the first part of the experiment, he gained about 20 pounds, all of which ended up around his waist. When Hirsch and his colleagues measured his caloric needs, they discovered he now required 4,620 calories a day simply to maintain his weight and that 569 of these calories were used to burn up his food. Like a furnace that was being stoked, he was burning up his calories at a furious rate, particularly just after meals.

9 The next step for the experimental subject was to diet until his weight was 20 percent below normal. This time, his metabolism slowed down after meals. He needed 2,871 calories a day to maintain his lower weight but, of those calories, only 109 were used for burning food. What these numbers show is that as the body gains weight, it burns up excess food at an increasing rate, but when it loses weight, it uses relatively few calories to consume food—it adjusts its metabolism to counteract any deviation from its ideal weight.

10 In his search to understand why people and animals seem driven to maintain particular weights, Leibel developed a method for measuring the propensity of fat cells to accumulate fat or to break fat down, and in doing so, he came upon an intriguing result. People who cannot spot-reduce may have fat cells in their problem areas that simply will not release their fat.

11 Leibel is looking at tiny molecules on the surfaces of fat cells called alpha and beta receptors. The alpha receptors stimulate fat accumulation and the beta receptors stimulate fat breakdown and, although human fat cells have both of these receptors on their surfaces, they vary in which kind of receptor is predominant. Leibel and his colleagues discovered that women tend to have fat cells on their hips and thighs that have predominantly alpha receptors, which means they tend to accumulate fat. The receptor study in general shows why different people have different fat distributions—the fat goes where the fat cells have primarily alpha receptors.

12 It would be wonderful if this understanding of receptors could lead to a "skinny pill" that forces recalcitrant cells to burn fat, but Hirsch and his colleagues believe that is not forthcoming. They do have drugs, however, that, in the laboratory at least, make isolated fat cells burn up fat. These are drugs that block alpha receptors or stimulate beta receptors, and Hirsch envisions someday using drugs such as these to help dieters lose weight where they want to lose it.

13 If there is a common theme to the stories emerging from laboratories and hospitals, it is the fat cell as culprit. Researchers are only beginning to comprehend the metabolic nature of these cells. They can't yet explain why certain people have more than others, or where these extra fat cells come from; but they hope that, with a better understanding of these cells, the signals to overeat may be circumvented.

14 For the time being, at least, the very fact that researchers are looking seriously at the biochemical basis of obesity should be comforting.

HOW WELL DID YOU READ?

How carefully did you read?

1. **Present evidence hints that the signals to overeat come from the**
   - **A** peripheral nervous system
   - **B** liver and pancreas
   - **C** fat cells
   - **D** thyroid gland

2. **"Set point" refers to an animal's or person's**
   - **A** percentage of weight fluctuation, up or down
   - **B** tendency to gain weight
   - **C** stable weight
   - **D** maximum weight

3. **Hirsch and Leibel's volunteer used the most calories to burn up his food when he**
   - **A** maintained his normal weight
   - **B** had gained twenty pounds
   - **C** weighed 170 pounds
   - **D** had lost 20% of his body weight

4. **Leibel thinks that people tend to gain weight in areas where they have a predominance of**
   - **A** tiny molecules
   - **B** white cells
   - **C** calories
   - **D** alpha receptors

Can you apply what you read?

5. **Which of these statements about animal weight is true, according to the article?**
   - **A** Animals allowed to eat naturally will maintain a consistent weight.
   - **B** Animal weight fluctuates with the change of seasons.
   - **C** Animals that are force-fed seldom return to their original weights.
   - **D** An animal's weight is never consistent, no matter what the diet.

6. **Which of these persons would be considered morbidly obese, according to the article?**
   - **A** A woman whose ideal weight is 100 pounds and who presently weighs 150 pounds
   - **B** A man whose ideal weight is 150 pounds and who presently weighs 300 pounds
   - **C** A man who weighs 225 pounds but who should weigh 175 pounds
   - **D** A woman who has weighed 140 pounds ever since she was sixteen years old

7. **People become fat primarily through an increase in the**
   - **A** amount of liquid surrounding the fat cells
   - **B** space between the fat cells
   - **C** tissue connecting the fat cells
   - **D** size of fat cells

8. **The psychogenic theory of obesity considered obesity to be the result of**
   - **A** mental problems
   - **B** malfunctioning taste buds
   - **C** certain chemical insufficiencies
   - **D** mutant chromosomes

9. **According to researchers at Rockefeller University, the number of fat cells in an animal's body**
   - **A** remains the same for the life of the animal
   - **B** may increase but will never decrease
   - **C** varies with the amount of food consumed
   - **D** continues to increase as the animal ages

10. The comparison of the furnace being stoked with the burning of calories is an example of

A personification
B metaphor
C onomatopoeia
D simile

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. satisfaction *(2)*
2. food; nourishment *(3)*
3. relapse; return to previous condition *(4)*
4. put forth a possibly true idea *(5)*
5. disordered; thrown into confusion *(5)*
6. chemical and biological processes *(9)*
7. change; difference; departure *(9)*
8. tendency *(10)*
9. resistant; unresponsive *(12)*
10. guilty party *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. cells *(1)*

A small, plain rooms
B receptacles for generating electricity
C tiny basic units of living matter

12. depression *(2)*

A sadness; gloom
B low place or hollow
C extreme slowdown in the economy

13. scores *(3)*

A musical compositions
B large groups
C grudges to be settled

14. common *(13)*

A second-rate; lacking quality
B ordinary; average
C shared by all; belonging to all

15. nature *(13)*

A basic character; basic quality
B physical universe
C variety; sort or kind

C. The Latin word *calor* and the Greek word *therme* both mean "heat." They are **roots** for many English words. Usually they appear as *cal* and *therm*.

Directions: The words in column II have the root *cal* or *therm*. Write the word that best fits each definition in column I.

I	II
16. heat regulator	calorimetry
17. making warm	thermostat
18. of the heat produced by atomic fission	scald
19. engine run by heat	calefaction
20. producing heat	thermal
21. process of measuring heat	calorific
22. science of the relation of heat to energy	thermonuclear
23. of heat; of warmth	thermomotor
24. pour boiling water on	thermodynamics

D. Synonyms are words that have the same or nearly the same meaning. **Antonyms** are words that have opposite or nearly opposite meanings.

Directions: For each word in column I, find a synonym or antonym in column II and write it.

I	II
25. stimulated	forgiving
26. imitates	separated
27. enduring	different
28. sufficient	lawful
29. combined	famous
30. legitimate	soothed
31. revengeful	favorite
32. luxurious	lasting
33. anonymous	copies
	inadequate
	squalid
	pretended

10

ADVICE TO WOULD-BE WRITERS:

You Need More Than A TYPEWRITER

by Erskine Caldwell

1 Probably almost everyone who makes his living as a storyteller has at some time asked himself how it happened that he did not become an actor or a banker or a shoe salesman instead of an author. And whenever anyone who professes to have the ambition to be a writer comes to an author for help and advice, several questions generally can be expected to be heard. The two questions, spoken and written, most frequently asked of me are: "How do you write a story?" and "How do you get a story published?"

2 After all these years I still do not know how to answer these questions to the complete satisfaction of curious readers and eager young writers. Evidently most of them think I am withholding a secret, because few are satisfied with my answer. The reply I usually make is that it has been my experience that the best way to learn to write is by writing, and that the best way to get a story published is to send it to magazines until an editor is found who is willing to accept it for publication.

3 Housewives in Texas, taxi drivers in Ohio, students in Nebraska, and clerks in California who have received such replies from me could rightfully complain that I failed to give clear and ample instructions for finding the "how" of writing and publication. Perhaps the reason I am a successful writer is that I consider creative writing to be motivated by a certain state of mind; and I believe that only those who are born with the gift or who acquire the indefinable urge to express themselves in print can accomplish it.

4 This state of mind, as I call it, is an almost uncontrollable desire that seeks fulfillment at any cost; it is a craving that will not be denied, similar to the overpowering physical necessity for food and drink. The intensity of this state of mind forces a person onward to whatever extent he is willing to go in order to achieve his conscious, or subconscious, goal in life.

5 The degree of intensity of this state of mind is the measure of success or failure. While many persons are willing to undergo almost any human hardship in order to learn how to write successfully, others, easily discouraged, find logical excuses for giving up and turning to another occupation. And just as there are these two extremes, there are also, and in greater number, those who yearn to be writers and yet lack the necessary ability to succeed.

6 It is often believed by many persons who have lived through long years of learning the craft of writing that those who willingly endure hardship are the ones most likely to succeed as creative writers. It would be foolish to maintain that a person must be penniless in order to fit himself for authorship, but it is true that the

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desire to be a writer is composed of, for one thing, a spirit of aggressiveness that impels a man or woman to strive to overcome anything that stands in the way of success. More common than wealth and ease, poverty and hunger are both symbolic and real, and the would-be writer is encouraged to greater effort as he sees himself gradually overcoming them. The same person, with similar talent but born to wealth, is likely to direct his aggressiveness toward the same goal —the gaining of fame and achievement as a man of letters. The reward of accomplishment, in the minds of the majority of authors, rich or poor, is the primary motive for writing, and the making of money is a secondary one.

7 I have rarely hesitated to discourage a person who says that he lacks the leisure to write, or that editors fail to appreciate his work. Such an attitude may seem to be unsympathetic; yet I feel it is honest and realistic, and consequently more beneficial than bland encouragement. Many would-be writers, perhaps unconsciously, are seeking excuses for not continuing to struggle for success, and they will live a happier existence and be more useful as citizens in an occupation other than writing. A person with the will to write can always find the opportunity; those who are not inclined to seek the opportunity usually have other interests, whether they know it or not, that are more dear to them.

8 Many who attempt to write fiction, either as a pastime or as a profession, would be more successful if they had a better understanding of the nature of what they are trying to do. There are many definitions of fiction. My definition of a novel or short story is that it is an imaginary tale with a meaning, interesting enough to hold the reader's attention and profound enough to leave a lasting impression on his mind. There probably are so-called natural-born storytellers, but I hold that the greater number of fiction writers acquire, either by diligent practice or by intelligent instruction, the ability to create a story with a completeness that will interest persons other than the author. And if enough persons become interested, it is reasonable to expect that at least one of them will be the editor of a magazine.

9 Probably all authors possess, to some degree, a native ability, even if the talent is no more than that of having the mental capacity to distinguish one word from another, but it is doubtful if anyone who has published a short story or a novel attained that distinction without first serving an apprenticeship, whether lengthy or brief. This period of going to school to learn fiction, combined with the state of mind that results in one's becoming an accomplished storyteller, draws to the surface whatever talent the writer possesses. Impatience, inadequate apprenticeship, or unwillingness to sit at a typewriter day after day and year after year may well outweigh the most intense state of mind or will to succeed. When this occurs, the desire to write may remain, but the ability is weak and ineffectual; what follows then is likely to be frustration and unhappiness.

10 Stories and novels are being written now and will continue to be written. Many of the new writers will be men and women of all ages who discover that one of the secrets of writing is in learning by practice how to express thought and feeling, and who practice until the stories they write are so good that readers wish to read them and magazines wish to publish them.

11 In my opinion, there are several vitally important steps in learning to write. First, learn the meaning and usage of words; second, learn how to construct a sentence to convey a desired thought; third, have something worthwhile to say before beginning a story; fourth, learn how to employ the emotional force of a story to produce lasting impressions upon the mind of the reader.

12 Your best stories, however, aren't complete until they're in the hands of the right publisher and in print. There's always room for one more good writer at the top, and the best way to get there is to start at the bottom. If you are not interested in starting at the bottom, you are probably not particularly interested in writing as a career. There are thousands of weekly newspapers, trade journals, little magazines, and specialized publications of every description. It seems reasonable to believe that anyone with sufficient determination and patience, and with some degree of writing ability, can find acceptance somewhere among all these publications. If the important thing in your life is to get your work into print, it will look good to you no matter where it

appears. And if it looks good to readers too, you'll find there are editors and publishers who will be very happy to help you along the way to the top.

13 The advice I would give to a young writer is this: Fit yourself for writing. Anyone who desires to become successful in his field undergoes a period of apprenticeship. Doctors, lawyers, bakers, barbers, mechanics, engineers, and printers must learn by experience. Why shouldn't writers?

HOW WELL DID YOU READ?

Did you see the point?

1. **To most people who ask the questions in paragraph 1 the author's reply is**
   - **A** puzzling
   - **B** revealing
   - **C** unsatisfactory
   - **D** challenging

What does the author think?

2. **Creative writing is done only by those who**
   - **A** know the secret of "how"
   - **B** have a great desire to write
   - **C** are born with a certain ability
   - **D** can afford to spend enough time on it

3. **Of would-be writers who do not succeed, the largest number are probably**
   - **A** lacking in ability
   - **B** insufficiently motivated
   - **C** too easily discouraged
   - **D** trying too hard

4. **Being born wealthy is a**
   - **A** definite advantage to a writer
   - **B** handicap a writer can overcome
   - **C** block to a writer's ambition to succeed
   - **D** factor not affecting the true writer's goals

5. **People who cannot find time to write**
   - **A** need a job that provides more leisure
   - **B** do not have a sufficient desire to write
   - **C** need more encouragement to succeed
   - **D** probably do not have enough talent

6. **The ability to tell a story well is probably**
   - **A** an aptitude that is born in a few people
   - **B** a talent that almost anyone can master
   - **C** a skill that cannot be learned from others
   - **D** an ability not necessary to most writers

7. **The will to succeed as a writer is**
   - **A** the only thing authors have in common
   - **B** a force able to overcome even inadequate training
   - **C** a drive less important than the desire to write
   - **D** a trait found in many unpublished authors

Can you see the similarity?

8. **Carrying out the first step in learning to write suggested by the author can best be compared to**
   - **A** jumping into deep water so that one has to learn to swim
   - **B** knowing how a car works before learning to drive
   - **C** selecting a gentle horse on which to learn to ride
   - **D** overcoming fear of heights before learning to fly

Can you draw the right conclusions?

9. **To see one's first stories in print, it is most important to be**
   - **A** ambitious
   - **B** realistic
   - **C** discriminating
   - **D** tactful

10. **There is evidence that the author**
    - **A** attained success by the methods he suggests
    - **B** wishes he had had the advantage of his own advice
    - **C** gives some advice intending no one to heed it
    - **D** received the advice he gives from another

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. claims *(1)*
2. inspired to action *(3)*
3. long; desire *(5)*
4. skill *(6)*
5. poor *(6)*
6. most important *(6)*
7. pleasantly smooth *(7)*
8. hardworking *(8)*
9. inborn *(9)*
10. thwarting of wishes *(9)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. ample *(3)*
    - **A** spacious
    - **B** adequate
    - **C** large in size

12. accomplishment *(6)*
    - **A** achievement
    - **B** social skill
    - **C** completion

13. appreciate *(7)*
    - **A** raise the price of
    - **B** be aware of
    - **C** think well of

14. instruction *(8)*
    - **A** command
    - **B** education
    - **C** knowledge

15. employ *(11)*
    - **A** hire
    - **B** keep busy
    - **C** use

C. *er* (one who)
eer (one who)
ee (one who receives an action)

A knowledge of these **suffixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the suffix *-er, -eer,* or *-ee* to complete each word so that it fits the definition. Write the word.

16. profit___ (one who makes excessive profits)
17. less___ (person to whom a lease is given)
18. pay___ (person to whom money is paid)
19. auction___ (person who auctions things)
20. draft___ (person who is drafted)
21. slay___ (one who kills)
22. pay___ (person who pays or is to pay)
23. trust___ (one to whom things are entrusted)
24. buccan___ (pirate)
25. refer___ (one to whom things are referred)

D. Figures of speech are used to make language richer and more vivid. But a figure of speech wrongly used or badly constructed will detract from rather than add to speech and writing. One common error is the **mixed metaphor**—a comparison that is inconsistent in some way. "She had so many irons in the fire that she could not keep her head above water" is a mixed metaphor, because it forces the reader to form two different mental pictures at the same time.

Directions: Each quotation contains a metaphor. If the metaphor is mixed, write *mixed*; if it is not, write *valid.*

26. "The harvest of a quiet eye,
    That broods and sleeps in his own heart . . ."
27. "The floodgates of controversy were opened and the apple of discord was thrown into the midst of the House of Commons."
28. "My heart leaps up when I behold
    A rainbow in the sky."
29. "Yet the President has backed him to the hilt every time the chips were down."
30. "A republic is a raft that will never sink."
31. "Mr. Speaker, I smell a rat; I see him forming in the air and darkening the sky; but I'll nip him in the bud."
32. "I was a stricken deer that left the herd."
33. "The thirsty earth soaks up the rain."

by Edwin Way Teale

The Death of a Lone Oak

1 For a great tree, death comes as a gradual transformation; its vitality ebbs slowly. Even when life has abandoned it entirely, it remains a majestic thing, sometimes dominating the landscape for miles around. Alone among living things it retains its character and dignity after death: plants wither; animals disintegrate; but a dead tree may be as arresting, as filled with personality, in death as it was in life. Even in its final moments, when the massive trunk lies prone and has moldered into a ridge, covered with mosses and fungi, it arrives at a fitting and noble end: it enriches and refreshes the earth; and later, as part of other green and growing things, it rises again.

2 The death of the great white oak on our Indiana homestead was so gentle a transition that we never really knew just when it ceased to be a living organism. It had stood there, between the sunset and the farmhouse, rooted in that same spot for at least two hundred years, providing a runway for countless generations of red squirrels, a perch for numberless robins, and shade for human beings.

3 The passing of this venerable giant made a profound impression upon my young mind. Just what caused the death of the proud old tree was then a mystery; but looking back, I believe the deep drainage ditches that had been cut through the dune-country marshes a few years before had lowered the water table just sufficiently to affect the roots of the ancient oak. Millions of delicate root tips were injured, and as they began to wither, the whole vast underground system of nourishment broke down, and the tree no longer was able to send sap to the upper branches. Like a river flowing into a desert, the life stream of the tree gradually dwindled and disappeared before it reached the topmost twigs; they died first, with the leaf at the tip of each twig—the last to unfold—the first to wither and fall. Then, little by little, the twig itself became dead and dry. This process of dissolution, in the manner of a movie run backward, reversed the development of growth. Just as, cell by cell, the twig had grown outward toward the tip, so now death spread, cell by cell, backward from the tip.

4 Sadly we watched the blight work from twig to branch, from smaller branch to larger branch, until the whole top of the tree was dead and bare. For years these dry, barkless upper branches remained intact; their wood

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became gray and polished by the winds. Then, one by one, their resiliency gone, the topmost limbs crashed to earth, carried away by the fury of storm winds. In fragments and patches, bark from the upper trunk littered the ground below. The protecting skin of the tree was broken, and in through the gaps poured a host of microscopic enemies, the organisms of decay.

5 Ghostly white fungus penetrated the sapwood, working its way downward through the unused tubes through which had flowed the life-blood of the oak. The continued flow of this sap might have kept out the fungus, but sap rises only to branches clothed with leaves, and as each limb became blighted and leafless, the sap level dropped to the next living branch below, fungus following close on its heels. From branch to branch the fungus continued its silent, deadly descent.

6 Soft and flabby, so unsubstantial it can be crushed without apparent pressure between a thumb and forefinger, this pale fungus is able to penetrate the hardest of woods by secreting wood-dissolving enzymes. Advancing in the form of thin white threads that branch again and again, the fungus works its way from side to side and downward through the dying tree. Beyond the reach of our eyes, the fungus laced the body of the tree with a root system of its own, pale and ghostly.

7 Behind the fungus, along the dead upper trunk, yellowhammers drummed on the dry wood with their chisellike bills, hewing out nesting holes which, in turn, admitted new organisms of decay. Each stage of dissolution brought with it a whole new interdependent population of dwellers and their parasites. Even while the lower branches of the oak still were green, insect wreckers already were at work above them. In the earliest stages their fare was the tender inner layer of the bark, the living bond between the trunk and its covering. As death spread downward, the beetles descended, foot by foot, some leaving in their paths elaborate patterns, branching mazes of tunnels like fantastic thousand-leggers engraved on the wood.

8 During the winter when I was twelve years old a gale of almost hurricane proportions swept the Great Lakes region. Weakened by the work of the fungus, bacteria, woodpeckers, and beetles, the whole top of the tree snapped off some seventy feet from the ground; after that, the progress of its dissolution was rapid. Finally, the last of the lower leaves disappeared, and the green badge of life returned no more. On summer days, the sound of the wind sweeping through the old oak had a winter shrillness. No longer was there the rustling of thousands of leaves above our hammock; no more was the *plump* of falling acorns: leaves and acorns, life and progress, were at an end.

9 In the days that followed, as the bark loosened to the base, the tree dwellers multiplied. I saw carpenter ants hurrying this way and that over the lower tree trunk; ichneumon flies trailing deadly, drill-like ovipositors hovering above the bark in search of buried larvae on which to lay their eggs; carpenter bees, their black abdomens glistening like patent leather, biting their way into the dry wood of the dead branches. Click beetles and small spiders found security between fragments of the loosened bark; and around the foot of the tree, swift-legged carabid beetles hunted their insect prey under cover of darkness. The yellowish-brown wood flour of the powder-post beetles began to sift about the base of the oak, in turn attracting the larvae of the darkling beetles. Thus, link by link, the chain of life expanded. To the expert eye the condition of the wood, the bark, the ground about the base of the oak, all told of the action of the innumerable interrelated forms of life attracted by death and decay.

10 Below this activity, beyond the power of human sight to detect, other changes were taking place, altering the underground root system that comprised almost as much wood as did the part of the tree aboveground. Fungus, entering the damaged root tips or working downward from the infected trunk, followed the sap channels and hastened decay. The great main roots, spreading out as far as the widest branches of the tree itself, altered rapidly. Their fibers grew brittle, their old pliancy disappeared, their bark split and loosened. The breakdown of the upper tree found its counterpart within the darkness of the earth —in the slow death of the roots.

11 I well remember the day the great oak came down. I was fourteen at the time. Gramp had measured distances and planned his cutting oper-

ations in advance; he chopped away fully half an hour before he had a V-shaped bite cut exactly in position to bring the trunk crashing in the place desired; hours filled with the whine of the crosscut saw followed.

12 Then came the great moment. A few last, quick strokes . . . a slow, deliberate swaying . . . the crack of parting fibers . . . then a long *swoosh* that rose in pitch as the towering trunk swung downward at increasing speed. There followed a vast tumult of crashing, crackling sound, the dance of splintered branches, a haze of dead, swirling grass. Then a slow settling of small objects—and silence. All was over. The lone oak was gone.

HOW WELL DID YOU READ?

What did the author say?

1. The real cause of the oak tree's death was probably
   - A lack of water
   - B wind damage
   - C fungus growth
   - D old age

Do you recall the time order?

2. The first injury to the tree was the
   - A penetration of fungus
   - B falling of the treetop
   - C withering of the twigs
   - D insect tunneling

Do you remember the details?

3. The fungus might have been kept out if the tree had had
   - A an unbroken covering of bark
   - B healthy lower branches
   - C sap flowing all through it
   - D both A and C

4. The tree's roots differed from its branches in that
   - A the roots remained healthy almost to the end
   - B fungus did not attack the roots
   - C deterioration of the roots was invisible
   - D decay in the roots involved far less wood

5. Beetles were most damaging to the tree's
   - A roots
   - B bark
   - C leaves
   - D twigs

Can you draw the right conclusions?

6. There is evidence in the story that the author
   - A visited the farm in winter and summer
   - B lived on the farm throughout his boyhood
   - C lived on the farm during the summers only
   - D lived on the farm all his life

7. This selection can best be characterized as
   - A a reminiscence of times past
   - B a thoughtful essay on nature's ways
   - C a lament that things must change and die
   - D an objective discussion of the dying process

8. The author is consoled by the idea that
   - A the tree lives on in other growing things
   - B no one knew just when the tree died
   - C the parasites that attacked the tree died with it
   - D the tree had stood for two centuries

9. The author's strongest feeling for the tree is
   - A pity
   - B curiosity
   - C envy
   - D admiration

Can you read between the lines?

10. The author felt that cutting down the tree was
    - A an act of disloyalty to an old friend
    - B a sad thing that had to be done
    - C a noble end that was too slow in coming
    - D a welcome finality

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. crumbled into dust *(1)*
2. shrank; diminished *(3)*
3. breaking up; ending *(3)*
4. anything that destroys *(4)*
5. ability to spring back *(4)*
6. included; contained *(10)*
7. ability to be bent *(10)*
8. thing that resembles another *(10)*
9. uproar *(12)*
10. having a twisting motion *(12)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. host *(4)*
    - **A** one who entertains guests
    - **B** great number; crowd
    - **C** organism in which another lives

12. descent *(5)*
    - **A** downward motion
    - **B** ancestry
    - **C** decline; fall

13. returned *(8)*
    - **A** came back
    - **B** gave back
    - **C** answered

14. condition *(9)*
    - **A** requirement
    - **B** state of being
    - **C** position; rank

15. pitch *(12)*
    - **A** resin from certain trees
    - **B** a plunging forward
    - **C** quality of sound

C. *homo* (same)
hetero (different)

A knowledge of these **prefixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the prefix *homo-* or *hetero-* to complete each word so that it fits the definition. Write the word.

16. _____centric (sharing a common center)
17. _____dox (departing from usual beliefs or established doctrines)
18. _____geneous (assorted)
19. _____chromatic (having contrasting colors)
20. _____chromatic (having the same color)
21. _____morphic (having various forms)
22. _____genize (make uniform by breaking down and reblending)
23. _____graphs (words that are spelled alike)
24. _____nyms (words that sound alike but have different spellings)

D. An **idiom** is an accepted phrase or expression that does not mean literally what it says.

She *threw cold water on* the project.

Throw cold water on is an idiom meaning "discourage" or "kill enthusiasm for."

Directions: The idioms in column II are built on the word *throw*. Write the idiom that best fits each meaning in column I.

I	II
25. engage in with vigor	throw away
26. give up; abandon; jilt	throw oneself into
27. fail to make use of	throw oneself upon
28. add free of charge	throw open
29. rely on for support	throw over
30. revert to ancestral type	throw together
31. obstruct by interference	throw back
32. assemble carelessly	throw in
33. remove all restrictions	throw a monkey wrench into

If you enjoyed reading the Green Power Builders, you might also enjoy the following Literature Selections:

22. *To a High Place*
23. *Whalesong*
24. *Family Happiness*

1

For food both cold and hot, put your nickels in the slot

by Daniel Cohen

UPI/Bettmann Newsphotos

An automat in Manhattan, 1937

1 In 1930, Jean Harlow arrived in New York for the premiere of Howard Hughes' adventure movie *Hell's Angels.* Between personal appearances, the star slipped away to fulfill a cherished dream of life in the big city. Luxuriating at the Savoy-Plaza? Partying until dawn at El Morocco? Not at all. The Blonde Bombshell went directly to an Automat and devoured four nickels' worth of baked beans. In those days the cafeteria, with its food behind coin-operated windows and its coffee spouting from dolphin-head spigots, could entice almost any visitor to Gotham. Sleek and airy halls that glistened with chrome and Carrara marble, the city's three dozen Automats were a symbol of metropolitan worldliness for more than fifty years after their own New York debut in 1912.

2 The Automat's combination of mass marketing and counterfeit grandeur inspired a *Who's Who* of artists, writers, and performers. At various times, Irving Berlin and Ira Gershwin composed lyrics about the Automat. Filmmakers from Preston Sturges to Francis Ford Coppola set films there. Edward Hopper and Norman Rockwell painted it, and Berenice Abbott included it in her classic photography project, *Changing New York.* The Automat was the victim of jokes by comedians such as Jimmy Durante and Jack Benny, an irresistible target for innumerable cartoonists including Peter Arno and Helen Hokinson, and a periodic backdrop for comic-strip characters from Winnie Winkle to Sad Sack.

3 For millions of New Yorkers of every social stratum, the Automat worked another kind of magic, serving sturdy, simple fare—macaroni and cheese, beef stew, and coconut cream pie—that was confoundingly inexpensive, soothingly consistent, and grabbed without a second's hesitation. A sandwich, dessert, and beverage totaled no more than thirty cents, and even a nickel cup of coffee could be comfortably nursed there all day.

4 With that unorthodox formula, Horn & Hardart, the company that developed and operated the Automats, served as many as 800,000 meals daily. Its recipes for blueberry pie, baked beans, and hot chocolate became classics of "square-meal" cooking that still inspire rhapsodies, and, according to New York's Mayor Ed Koch, "They had absolutely the best coffee ever."

5 The Automat's founders, Joseph V. Horn and Frank Hardart, met in 1888 and opened a tiny, fifteen-stool lunchroom in central Philadelphia, using $1,000 borrowed from Horn's reluctant family and a recipe for French-style drip coffee that Hardart, a journeyman of the quick-lunch trade, had mastered while growing up in New Orleans.

6 The lunchroom succeeded and the partners opened several more, along with a central commissary where nearly all the company's cooking and baking were done to keep expenses down. From there the food was delivered to the various outlets around town.

7 In 1900, Hardart, during a trip to Europe, spent $30,000 in Berlin to purchase duplicate

Adapted from "Put Your Nickels in the Slot," by Daniel Cohen. Smithsonian, *1986. Copyright © 1986 by Daniel Cohen. By permission of the author.*

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equipment of that city's celebrated "waiterless restaurant," the Quisisana Company Automat, which dispenses hot and cold food and beverages. The first American Automat was installed at 818 Chestnut Street in Philadelphia in 1902.

8 From the beginning, it had been Joe Horn who enforced inflexible standards on the company cooking. "There is no trick to selling a poor item cheaply. The real trick is to sell a *good* item cheaply," he pontificated, not only out loud but in a leather-bound rule book distributed to every manager in the chain. The book listed the appropriate way to handle each one of nearly 400 menu items, including intricately detailed instructions on the preparation and serving of their wonderful coffee, the recipe for which was locked up in a safe.

9 By 1932, the mammoth H & H kitchen in Philadelphia was annually turning out 2.6 million servings of coconut pie, a million bowls of clam chowder, and 127,000 turkeys—along with comparable quantities of scores of other dishes. Two thousand pies an hour emerged on conveyer belts from the oven.

10 What catapulted the Automat to stardom was its 1912 opening on Manhattan's Times Square, a site at Broadway and 46th Street where the subway disgorged 200,000 people daily onto the streets of the Great White Way. In addition to the after-theater crowd, the boardinghouses and cheap hotels that lined the side streets assured it a three-meal-a-day clientele of theater hands, clerks, and blue-collar workers. Sensing its big opportunity, the Philadelphia firm launched a sister Horn & Hardart company to operate its New York outlets.

11 The Times Square Automat's clientele included show-business personalities, who adopted it not only as a meeting spot but also as a part of their stage material. "I put a slug into the Automat, and whaddya think came out?" Jimmy Durante deadpanned. "The manager!" W. C. Fields, a Ziegfeld Follies comedian at the time, said he liked to eat at the Automat, then pick his teeth in front of the Hotel Astor, two blocks away.

12 The Automat's most impressive commercial success arrived only with the Great Depression. By attracting customers who might have rejected it in more prosperous times, H & H increased its volume by 50 percent in the two years following the 1929 stock-market crash. While most of the economy was still sinking, H & H's profits and stock rose and it boasted of hiring more than 1,000 new workers in New York during that period.

13 The public gravitated to the Automat partly because the regulations allowed them to remain there as long as they could make a reasonable show of eating. For a population that was counting every nickel, the Automat became a combination living room and social club.

14 Broadway toasted the Automat in Depression-era comedies, including the 1937 film farce *Easy Living,* which portrays the hungry and unemployed sitting balefully in front of the well-stocked hatches. When Ray Milland, an Automat worker, tries to slip penniless Jean Arthur a free beef pie, a hard-nosed house detective confronts him. Milland initiates a brawl that activates a "secret" lever, flinging open every food-promising door and resulting in a pie-throwing melee as down-and-outers race to obtain free food.

15 High society, meanwhile, turned the Automat into its playground, cementing the restaurant's role as a publicity backdrop. Throughout the years, the press has noted visits by celebrities like David Niven, Gloria Vanderbilt, Andy Warhol, Madame Chiang Kai-shek, Aimee Semple McPherson, Tennessee Williams, Brooke Shields, and generations of politicians.

16 It was Jack Benny, however, who staged what was perhaps the greatest publicity coup at an Automat. Benny, who had promulgated himself as the cheapest man in Hollywood, hosted the kickoff party for his 1960 television season at New York's cheapest restaurant. Having dispatched invitations on penny postcards, Benny stood in the cashier's booth solemnly handing each guest a two-dollar roll of nickels. With limousines lining the block, klieg lights, and even a red carpet, the event captured nationwide attention.

17 There would be little enough partying for H & H in the decade that followed, for the Automats, once bustling symbols of the future, by the 1960s had become cavernous, dingy hangouts for people with nowhere else to go. The problems the Automat confronted were a catalog of the changes transforming American life in the post-war years. The prosperous younger generation sought more elegant dining "experiences." Loyal Automat customers departed the city—or lost their taste for Automat food, and other standardized restaurant chains were expanding rapidly into new territory, with limited menus and counter or table service.

18 Because the Automat's food standards—and expenses—were so high and its prices so low, it had no margin to accommodate increased pay and benefits. Red ink appeared in the ledgers in both cities for the first time in the mid-1960s. The last Philadelphia H & H, a table-service restaurant in a shopping center, survives on a month-to-month lease. The firm donated part of the first Automat, which shut its doors in 1968, to the Smithsonian's National Museum of American History, where it remains on permanent exhibit.

19 However, H & H *has* survived—and then some—in New York, where a decade ago it transformed all but one of the Automats—at many of Manhattan's choicest locations—to fast-food franchises. With 60 percent of its revenues now coming from Hanover House, a fashion and housewares mail-order business, H & H has grown to a robust $339 million corporation. The last Automat, recently refitted with Art Deco as a memento, sells gourmet cookies from a kiosk and caters to private parties, where guests disco among the glass hatches. The slots no longer accept nickels or even quarters, but special tokens sold by a cashier, and the coffee, at thirty-five cents a cup, remains one of New York's greatest bargains.

HOW WELL DID YOU READ?

How exact was your reading?

1. **The first Horn & Hardart Automat opened in**
   - **A** 1900
   - **B** 1902
   - **C** 1930
   - **D** 1932

2. **H & H obtained the equipment for its "waiterless restaurant" in**
   - **A** the Netherlands
   - **B** Austria
   - **C** Germany
   - **D** France

3. **The Automat that made H & H famous was located**
   - **A** at 818 Chestnut Street
   - **B** in New Orleans
   - **C** on Broadway at 46th Street
   - **D** in the Hotel Astor

Can you draw the right conclusions?

4. **Visitors to the Automat can be described as being**
   - **A** members of every level of society
   - **B** only clerks and other office workers
   - **C** primarily blue-collar workers
   - **D** mainly celebrities and socialites

5. **The food at the Automat was**
   - **A** moderately priced and good
   - **B** elaborate but tasteless
   - **C** expensive but excellent
   - **D** simple and predictable

6. **In order to keep expenses down H & H**
   - **A** began using cheaper ingredients in the food
   - **B** stopped giving employees free meals
   - **C** hired efficiency experts to help
   - **D** opened a central kitchen and storage facility

7. **That during the Great Depression the H & H Automats succeeded while the economy failed is an example of**
   - **A** fantasy
   - **B** metaphor
   - **C** irony
   - **D** destiny

8. **The decline of the Automat was due to**
   - **A** younger people looking for fancier dining
   - **B** regular customers moving away from the city
   - **C** fast-rising prices of Automat meals
   - **D** both **A** and **B**

Can you make the right inferences?

9. **During the Great Depression, the Automat served as a**
   - **A** gathering place
   - **B** savings and loan
   - **C** boardinghouse
   - **D** grocery store

10. **Because of its appeal to people in the entertainment industry, the Automat gained**
    - **A** many famous investors
    - **B** free publicity
    - **C** contacts in the public relations business
    - **D** access to the world's most famous chefs

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. first showing; first screening *(1)*
2. level *(3)*
3. skilled worker; one who has learned a trade *(5)*
4. storage facility *(6)*
5. delivered dogmatic opinions *(8)*
6. complicatedly; complexly *(8)*
7. launched; shot *(10)*
8. discharged; sent out *(10)*
9. was attracted *(13)*
10. evilly; ominously; with foreboding *(14)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. combination *(2)*
    - **A** ordered series of numbers
    - **B** a uniting; two or more things that have been put together
    - **C** instrument for performing two or more tasks

12. bowls *(9)*
    - **A** rounded dishes
    - **B** wooden balls used in a game
    - **C** post-season football games

13. hands *(10)*
    - **A** rounds of applause
    - **B** styles of penmanship
    - **C** workers; employees

14. spot *(11)*
    - **A** mark; stain
    - **B** place; area
    - **C** bit; small quantity

15. stock *(12)*
    - **A** supply of things
    - **B** animals raised on a farm
    - **C** shares in the company

C. The **prefix** *syn-* comes from the Greek word *syn*, meaning "with." It is used with many English words to lend them the meanings "with; together"; "at the same time"; "by means of." *Syn* changes to

syl	before *l*
sym	before *m*, *p*, and *b*
sys	sometimes before *t*

Directions: Use the correct form of the prefix *syn-* to complete the words in column II. Then write the word that fits each definition in column I.

I	II
16. letters pronounced together	___agogue
17. regulate clocks and other mechanisms to make them agree	___tematic
18. made of a chemical mixture; not natural	___onyms
19. conference for discussion on one particular subject	___chronize
20. place where people come together to worship	___lable
21. condition that is indicative of a disease	___phony
22. long composition for full orchestra	___thetic
23. orderly; methodical	___posium
24. words with the same or similar meanings	___ptom

D. An **idiom** is a phrase or expression that has an accepted meaning different from its literal meaning. Idioms have various origins; many have entered current speech from the language peculiar to an occupation, profession, locality, or sport.

Directions: The idioms in column II have come into accepted usage from hunting. Write the idiom that best fits each definition in column I.

I	II
25. present at the end of some action	draw a bead on
26. hint or speak indirectly	smoke out
27. run from danger or difficulty	in at the kill
28. take careful aim at	keep track of
29. pursue; run after	track down
30. pursue until caught	shot through with
31. filled with something undesirable or dangerous	turn tail
32. stay informed about	give chase
33. drive into the open; force out of hiding	beat around the bush

2

AN INSIDE LOOK AT A PLAY

Before Opening Night

by Harold Clurman

1 "We're going into rehearsal tomorrow," an actor may say, showing a mixture of certain apprehension and an anticipation close to elation. The explanation for the duality of the reaction lies in the knowledge that on the one hand, rehearsal is the crucible of creation for everyone concerned in play production, and that on the other hand, for all the blood, sweat, and tears that will be expended, the play may fail, or he or she may fail in it.

2 When you read the script of a play, all you have are words suggesting what may happen on the stage. In terms of color, sound, movement, people, and a specific environment, all is shadowy. The function of rehearsals is to transmute words into a world.

3 Many dramatists do not even trouble to write stage directions. But a stage setting has to be built out of real materials, so that people can move on it and certain actions can be conveniently performed on it; the audience, moreover, must be able to sense in looking at it what sort of theme and mood they are to dwell in and enjoy for the duration of the performance.

4 The physical aspect of production, though most immediately striking, is not the most important. When rehearsals begin, the settings and props have already been designed and ordered, though they will not appear till the last four days of rehearsal—usually out of town. What is crucial to the production is the integration of the company of actors in their individual interpretations. It is this that the director must effect so that all the elements—the visual and human—form a coherent and pleasurable meaning.

5 The director is, to a considerable degree, the "author" of the *stage* play. The director should always be in charge, but may not always be in control. It is often said that the director "molds" the actors' interpretations; this is largely true—and most flattering to the director—but accomplished actors may themselves be creators.

6 The wise director knows and hopes to understand the actors and what each has to offer and can be induced to reveal. Hence the most complex and fascinating aspect of rehearsal is the give-and-take between the actors and the director as well as the relations between the actors themselves.

7 Some directors have the company sit and read the play together for three or four days. Other directors desire no more than a single joint reading of the play; some—though very few—even insist that actors know their lines before rehearsals have begun.

8 After the play is read, the company gets "on its feet"; the process of staging—commonly called "blocking"—begins. This involves the placement of actors, the timing and manner of their movements on the stage—in short, the setting of the mechanical or visible patterns of the production.

9 Sooner or later, the director will in some way indicate not only where the actor is to

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move—cross, sit, rise, turn—but why and how. These questions imply others. Is the play to be given a comic or a sober interpretation? What style suits the material? Is a certain character to be regarded as sympathetic or not? Does it help or harm if a particular line or bit of business provokes a laugh?

10 The actor may contest interpretations or even refuse to carry out bits of action on the grounds that they are false, or that he or she does not happen to be able to enact them convincingly. Such arguments generally end by one or the other yielding a point, depending either on the authority and persuasiveness of the director or the humility, receptiveness, or status of the actor.

11 A compromise may be arrived at that will enrich the issue. It is never good counsel to make these occasions a contest of wills. The director who by force of will beats the actor at this game wins a fruitless victory.

12 Some directors prefer to communicate with their actors rather privately—in odd corners of the stage or in dressing rooms. Others always pronounce themselves within the hearing of the entire company. The director may act a bit by way of illustration—rather dangerous if the demonstration fails to be clear, and sometimes discouraging if it should be too brilliant of a performance.

13 Out in front in the theater auditorium where, after the first days of blocking, the director usually sits, all is darkness; on the stage, a rather evil illumination is projected from a wan worklamp. The production's eventual furniture is suggested by broken-down chairs, uncouth couches, dirty steps, and insecure card tables; and crockery by paper plates, cups, knives, and forks.

14 The playwright and producer attend all the first rehearsals. They visit less frequently after the first five-day trial period—when cast changes may be most conveniently effected—and do not make their presence seriously felt until the run-throughs when the play in its entirety is given without interruption.

15 There are generally three to five run-throughs at which the director feels the company is ready to be criticized by "outsiders." A large or small audience of friends may be invited to the last two of the run-throughs. They serve to diminish the actors' tension before the out-of-town tryout. They may also instruct the actors where laughs may be expected or warn the company of undesirable audience reactions.

16 Still, these run-throughs are not without their pitfalls; the threat stems from the expert as well as inexpert advice of relative strangers. The chief emphasis in the talk one hears after these run-throughs is on guessing the play's probable success or failure—an utterly futile practice.

17 A play on the stage is the most elusive of phenomena. After more than thirty years of professional experience, the writer is quite frank to admit never to have been certain of the success or failure of a play in production. Any professionals who claim even a 50 percent degree of infallibility are deluding either themselves or others. The script may seem unpromising, the preview audiences may react coldly, yet the play may turn out to be a solid hit.

18 A play on the stage is not only different in nature from its point of origin in the script, but it is never exactly the same from one rehearsal or performance to another. Most plays at the tenth day of rehearsal are miserably dull. A set that looks "great" may be causing a short circuit in the proceedings—a fact that only the most trained observer may notice.

19 A fine actor who later will give a brilliant performance sometimes develops rather haltingly at rehearsal (or vice versa). The theater building itself (when too large or small) may modify the impact of a play. A nervous seizure (or "freeze") on the part of a star on opening night may mortally influence the quality of a production—particularly a comedy—thoroughly enjoyed out of town.

20 The final rehearsals—with settings, lights, costumes, makeup, sound effects—occupy four days before the out-of-town opening. They are often tumultuous and frightening, for the addition of any new element to a rehearsal (even a change of locale) always upsets it somewhat. Though actors have seen models and sketches of the sets at rehearsals, and have tried on their various costumes in the costumer's workshop, it takes several days (at least) to adjust to them on the stage.

21 Rehearsals for four hours a day continue out of town. They are especially useful for the revision of text and the necessary work attendant upon that. This time is also valuable for bringing characterizations to maturity and for polishing scenes which may still be rough in execution or shallow in content.

22 The out-of-town tryout period is a weird island of time. The world at large has ceased to exist for everyone connected with the produc-

tion. The atmosphere is intoxicating in both the happy and the forbidding sense of the word. If there is to be trouble—scandalous disagreements, rancorous episodes—here is where it is most likely to occur. Everyone acts as if it were zero hour, not alone for the play, but also for survival.

23 Yet there is joy in creation even as there must be pain. If rehearsals are conducted—as many are—with love and mutual regard on all sides, a wonderful sense of community grows in a theater troupe that is hard to match in any other collective enterprise elsewhere.

HOW WELL DID YOU READ?

Did you notice the important details?

1. **The complete objective of the rehearsal is to**
   - **A** create a world within the limits of the script
   - **B** give actors practice in delivering their lines
   - **C** translate written words into action
   - **D** establish the mood of the play

2. **In the script of every play can be found**
   - **A** suggestions for what will happen on stage
   - **B** specific directions for setting and staging
   - **C** a description of the characters in the play
   - **D** both **A** and **C**

3. **"Blocking" is the process of**
   - **A** provoking give-and-take between members of the cast
   - **B** placing and timing an actor's stage movements
   - **C** integrating all elements of the play
   - **D** reading sections of the play aloud

Can you see why?

4. **The author describes the crude set used in first rehearsals to show that**
   - **A** staging reflects both the theme and mood of a production
   - **B** the visual elements of a play are least important at this point
   - **C** the success of the play is still in doubt
   - **D** theater work is not all glamorous

5. **A small audience is invited to a runthrough to**
   - **A** test probable audience reactions
   - **B** determine whether the play will be a success
   - **C** suggest changes in scenery and staging
   - **D** none of the above

Did you grasp the important points?

6. **When a production is in finished form, each performance is**
   - **A** as it was rehearsed
   - **B** different from every other
   - **C** better than the one preceding it
   - **D** more predictable than the one preceding it

7. **For the cast, the out-of-town tryout is a period of**
   - **A** cautious relaxation
   - **B** intense concentration
   - **C** deserved celebration
   - **D** deliberate confusion

What does the author think?

8. **When director and actor disagree, the director should**
   - **A** enforce his or her interpretation
   - **B** yield to the actor's point of view
   - **C** leave the decision to the playwright
   - **D** try to effect a compromise

9. **The director's active demonstrations may be dangerous because a director may**
   - **A** discourage the actors or mislead them
   - **B** not have an ability on a par with the actors'
   - **C** cause resentment by interfering
   - **D** cause the actors to sacrifice originality through imitation

Can you see the author's purpose?

10. **The author probably wrote this article to**
    - **A** enrich a layman's appreciation of what is involved in production
    - **B** show the complexities of an actor's role
    - **C** urge directors to use certain techniques
    - **D** clarify what is meant by "a hit"

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. severe test *(1)*
2. change from one form to another *(2)*

3. of supreme importance *(4)*
4. logically connected; intelligible *(4)*
5. persuaded *(6)*
6. include necessarily *(9)*
7. unprofitable *(11)*
8. pale; feeble *(13)*
9. agitated; violent *(20)*
10. spiteful; bitter *(22)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. apprehension *(1)*
    A arrest; capture
    B mental grasp; perception
    C foreboding; dread

12. anticipation *(1)*
    A expectation
    B prevention
    C preparation

13. shadowy *(2)*
    A fleeting; transitory
    B dim; indistinct
    C dark; gloomy

14. striking *(4)*
    A apparent
    B attacking
    C refusing to work

15. illumination *(13)*
    A lighting
    B clarification
    C decoration

C. *cy* (quality, condition, state, or fact of being; position, rank, or office of)
ure (act or result of an action; agent or instrument of action; state of being)
urgy (fabricating or working of)
mancy (divination; fortunetelling)

A knowledge of these **suffixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the suffix *-cy, -ure, -urgy,* or *-mancy* to complete each word so that it fits the definition. Write the word.

16. regen_____ (state of being, or office of, a regent)
17. agen_____ (fact of acting for another)
18. dramat_____ (art of writing or producing plays)
19. necro_____ (fortunetelling by supposed communication with the dead)
20. candida_____ (state of being a candidate)
21. metall_____ (metalworking)
22. legislat_____ (agent or instrument of making laws)
23. aleuro_____ (fortunetelling by the use of flour)
24. investit_____ (act of investing with an office, power, etc.)

D. Figures of speech are used to make language richer and more vivid. Two devices that are often used to add color to language are **hyperbole** and **understatement.** Hyperbole is exaggeration for effect, not meant to be taken literally: "This rock is as old as time." Understatement is the opposite of hyperbole; it minimizes for effect: "This rock has been around for a few years."

Directions: These statements and quotations are either hyperbole or understatement. Write *hyperbole* or *understatement* for each.

25. The mountains touch the sky.
26. He has been our friend for ages.
27. The elephant is a fairly sizable animal.
28. ". . . that climax of all human ills,
    The inflammation of his weekly bills."
29. "The world and its ways have a certain worth."
30. "He was a host of debaters in himself."
31. "Tobacco—divine, rare, superexcellent tobacco."
32. "He found it inconvenient to be poor."
33. "And the scenery's divine."

Why Are You Laughing?

by Ashley Montagu

1 The human is the only animal that laughs. Why is this true? What makes us respond as we do to pleasurable experiences? What is the history of this "happy convulsion," as someone once termed it, and just what is its function?

2 We are not short of theories to explain the mystery; for centuries, biologists, philosophers, psychologists, and medical doctors have sought a definitive explanation of laughter. One writer theorized that its function is to intimidate others or to gain stature over them by humiliating them. Another took the opposite view: that we laugh in order not to cry. A psychologist offered the explanation that laughter functions as a remedy for painful experiences, and that it serves to defend a person against what the psychologist termed "the many minor pains to which man is exposed." In the seventeenth century a writer set forth the theory that we laugh when we compare ourselves with others and find ourselves superior; in effect, we laugh at the infirmities of others.

3 Virtually every theory has been concerned with either the structure or the function of laughter, whereas relatively few have been devoted to the question of its origin. I propose to offer a theory which, so far as I am aware, has not previously been set forth: that only those animals capable of speech are capable of laughter; and that therefore the human, being the only animal that speaks, is the only animal that laughs.

4 Those of us who have observed chimpanzees closely feel quite confident that the chimpanzee occasionally exhibits behavior that looks very much like a primitive precursor of human laughter. This behavior, however, has been observed only in a human context; whether or not it occurs under natural conditions is dubious; but the very fact that under any conditions an ape is capable of such behavior is of more than passing interest—for does it not indicate that early man had the rudiments of laughter?

5 Laughter is defined as an emotional response, expressive normally of joy, involving characteristic sounds of the voice and movements of the features and the body. The joy may take the form of mirth, amusement, ridicule, and so on. Why should laughter be as intimately associated with the power of speech as I have suggested? Speech is the verbal, or vocal, expression of

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symbols and the relations between symbols. Probably at about the same time speech evolved, laughter originated, too, as a kind of semiverbalized social expression of pleasure. With the development of speech, the number of occasions producing sudden experiences of pleasure increased, and, since laughter was closely associated with speech, people had this means of expressing pleasure. Having broken the "sound barrier," as it were, they could express with laughter what other animals could not. Since the lower animals had no speech, they encountered fewer pleasurable situations and, furthermore, were unable to laugh no matter what was the stimulation.

6 Once the first laughter had been laughed by primitive people, with such apparently pleasurable effects all around, laughter began to take on an intrinsic value within society. The person possessing the ability to communicate pleasure in a loud laugh began to enjoy social advantages over more serious colleagues and became a "good mixer," socially selected and liked by society. Thus the process of natural selection (the survival of the fittest) would tend to operate in favor of those able to express their pleasurable states in laughter, as compared with those not so able. Throughout the course of evolution, laughter would become established throughout the human species as a function of sociological and psychological value.

7 Thus laughter gradually became established as a capacity among virtually all human beings. In addition, laughter's infectious quality helped distribute it as a characteristic common to all humans. Laughter was advantageous; therefore it survived.

8 Everyone likes good laughers; they bring good cheer with them wherever they go; the very thought of them makes life more bearable. Even today our most highly paid entertainers are not tragedians but comedians. Laughter is infectious, and most of us go out of our way to acquire the infection. We cannot think that it was otherwise in the earlier days of human evolution, and if that was indeed so, then it would follow that the capacity to laugh would tend to become increasingly distributed as a trait common to all people.

9 In society, laughter became a characteristic that served to "humanize" because it is essentially a social phenomenon, largely controlled by the civilization in which it takes place. The times change, and the situations about which laughter is acceptable change correspondingly. A few hundred years ago it was socially acceptable to laugh at the infirmities of others; today it is not so. In the Western world it is not customary to smile at the reprimands of others, as it is in Japan. Movie personalities should smile or laugh in their photographs, but college professors should look serious. Each of these examples underscores laughter's social function.

10 Let us now consider a second stage of our hypothesis: that nature favors those capable of expressing their pleasure in laughter. It is well known that laughter has a tonic effect on the mind and body, suffusing the body with a feeling of well-being that few other activities are able to provide, refreshing, relieving, enlivening, and involving the whole body in its "happy convulsion." The action of the trunk and diaphragm accelerates the intake and output of air to and from the lungs. The freshening effect follows as the blood receives more oxygen and circulation becomes more efficient.

11 The effects experienced during laughter are likely to overflow into many segments of the body, resulting in reflex changes in muscles and glands, such as tearing of the eyes and secretion of moisture from the nose. Such changes have definite functions—to assist in more rapid respiration and to prevent dehydration of nasal and throat membranes as a result of the more rapid respiration.

12 These effects of laughter, which scientists term its "psychophysiological" effects, appear, then, to be nature's method of conferring "survival benefits" upon those individuals capable of laughter. This presumably embraces the vast majority of people; should there be those incapable of laughter, it may be conversely assumed that nature's dole of "survival benefits" to such individuals is proportionately smaller.

13 What is the explanation for the loud, distinctive noises that are characteristic of hearty laughter? Possibly cave dwellers were uninhibited about expressing their pleasure at times of sudden happiness, and the loudness of their laughter enhanced it for persons who heard it. Even today our inhibitions seem to dissipate when we are convulsed in laughter, and often the volume of genuine laughter makes it more infectious to individuals around us.

14 There remains one matter with which we should deal: the relation of the smile to laughter insofar as it bears upon our theory of the origin of laughter. The smile comes before laughter, as demonstrated by infants who can barely smile after six days, but who sometimes laugh at

twelve weeks. By the twelve-week stage they become comparatively sophisticated creatures, although not much differently equipped physically than they were at six days. At twelve weeks, although they cannot speak, they begin to understand the general meaning and tone of uttered human sounds, and the dawn of the smile becomes the bright noonday sunlight of audible laughter. Consequently, we may again connect the origin of laughter with the origin of speech, as indicated by the gradual development of these two capacities in the human infant.

15 The development of speech undeniably is an indispensable factor in the development of our capacity to think and establish a mastery of our environment; it was also, I theorize, the basic condition in the development of laughter. You laugh because we learned to speak and therefore to laugh, and because nature confers benefits on the animal capable of laughter.

HOW WELL DID YOU READ?

Did you see the point?

1. **This theory is most unusual for**
   - **A** attempting to explain the function of laughter
   - **B** attempting to explain the origin of laughter
   - **C** defining the laughter response
   - **D** connecting laughter with speech

What does the writer think?

Some of the following statements reflect the author's beliefs as expressed in this selection, and some are contrary to his beliefs. If the author would agree with the statement, write **A.** If he would disagree, write **D.**

2. Laughter and speech evolved at about the same time.
3. Laughter is a completely human means of expression.
4. Babies probably first laugh at unusual sounds or funny faces that their parents produce for their enjoyment.
5. Laughter is valuable for its effects, but has little or no intrinsic value.
6. It is invalid to make assumptions about the cave dwellers' society based on our knowledge of modern people.

What did the writer say?

7. **The process of natural selection operated in favor of those able to laugh, because laughter**
   - **A** stimulated speech
   - **B** was healthful
   - **C** was a social advantage
   - **D** both **B** and **C**

How carefully did you read?

8. **The social function and characteristics of laughter seem to**
   - **A** change with changing times
   - **B** remain constant through the ages
   - **C** vary from individual to individual
   - **D** be inflexibly interrelated

Can you draw the right conclusions?

9. **Many explanations of laughter are mentioned in the article; the one thing they have in common is the idea that we laugh**
   - **A** to gain the advantage in a situation
   - **B** for our own good
   - **C** in self-defense
   - **D** because of an awareness of psychophysiological benefits

10. **The fact that chimpanzees indulge in something resembling laughter conclusively proves**
    - **A** that even undomesticated animals can laugh
    - **B** that laughter and speech are twin traits
    - **C** nothing definite about the origin of laughter
    - **D** that early humans were endowed with the ability to laugh

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. final; complete *(2)*
2. weaknesses *(2)*
3. forerunner *(4)*
4. undeveloped forms *(4)*
5. inherent; essential *(6)*
6. reproofs *(9)*

7. tentative explanation *(10)*
8. overspreading *(10)*
9. added to the value of *(13)*
10. be driven completely away *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. happy *(1)*
    A joyous
    B fortunate
    C suitable

12. stature *(2)*
    A height
    B attained growth
    C prestige

13. function *(6)*
    A duty
    B normal action
    C ceremony

14. tonic *(10)*
    A invigorating
    B of tones
    C mentally stimulating

15. capacities *(14)*
    A abilities to contain
    B aptitudes
    C positions

C. The **roots** *lev* and *grav* come from the Latin words *levis* and *gravis.*

levis (light; slight; trivial)
gravis (heavy; weighty; serious; important; severe; grievous)

Directions: Use the root *lev* or *grav* to complete each word so that it fits the definition. Write the word.

16. _____e (requiring serious thought; of a threatening nature)
17. al_____iate (lighten; make less hard to bear)
18. _____itate (rise in the air because of lightness)
19. _____ity (trifling gaiety; unseemly frivolity)
20. _____imetry (the measurement of weight)
21. _____ity (solemnity; enormity)
22. ag_____ate (make more burdensome)

D. Synonyms are words that have the same or nearly the same meaning; **antonyms** are words that have opposite or nearly opposite meanings.

Directions: Of the three words in each line, two are related, either as synonyms or as antonyms. The third word is unrelated. Decide which of the words are related and what the relationship is. Write **S** or **A.**

23. reprimand, rebuke, restrict
24. unnecessary, indispensable, indiscriminate
25. satisfying, gratifying, grateful
26. eloquent, expressive, impressionable
27. humiliating, frightening, shaming
28. painful, painstaking, pleasurable
29. therefore, consequently, regardless
30. clearly, intimately, closely
31. evolution, revolution, development
32. verbose, verbal, mute
33. diversely, familiarly, similarly

THE THEORY OF RELATIVITY:

A Key to the Universe

by Elma Ehrlich Levinger

1 The clerk from the Swiss Patent Office drew a package from the pocket of his shabby coat. The editor ran a practiced eye over the closely written sheets of manuscript, remarking thoughtfully, "H'm, thirty pages."

2 "It will be much shorter in print," the clerk assured him.

3 "But the issue I'm preparing for the press is already rather crowded."

4 Albert Einstein flushed a little and said, "I should like to see it printed if you can find room for it; I think your readers may find it interesting."

5 The man behind the desk, thinking, perhaps, about the enthusiastic response Einstein's four previous papers had drawn, murmured, "Let's see." He read the title, "Toward the Electrodynamics of Moving Bodies," and, frowning in concentration, glanced over the initial pages. "Now what's all this about relativity?"

6 Others all over the world were to ask the same question; countless studies, many of them profound and perceptive, and even more of them foolish, were to be written about it. Within a short time after the publication of his paper, Einstein was to be acclaimed by many as the greatest scientist who ever lived.

7 Curiously enough, it was a seeming failure that had given him a clue to his revolutionary theory. In 1887, while Einstein was a schoolboy in Munich, two American professors, Albert Abraham Michelson and Edward William Morley, were working on a fascinating problem. Knowing, as did all scientists, the speed at which the earth revolves round the sun, these two men tried to find out how fast the earth travels on its own path through space. To determine this, they designed an experiment that would measure with absolute exactness the speed of light going "with" the motion of the earth and "against" it. They constructed an ingenious apparatus consisting of two pipes placed at right angles to each other so that if light passing through one followed the direction of the earth's motion, light going through the other would have to "cross the current," like a swimmer crossing a river, and would be measurably slower. A mirror was placed at the end of each pipe, and a beam of light was shot into each pipe at exactly the same moment.

8 The experiment, however, did not produce the anticipated result; although the men moved the pipes in every direction, there was never any appreciable difference in the speed with which the two beams of light were reflected—they always came back together at the identical fraction of a second. After trying repeatedly, the experimenters became discouraged; it was an irrefutable fact that the earth moved, but their work indicated that it was standing still—a startling and terribly baffling development.

9 In the paper that he published eighteen years later, Einstein answered the question that had long puzzled not only Michelson and Morley, but all the eminent physicists of the day. The two Americans had not failed; on the contrary, their measurements had been accurate. Einstein's theory explained

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that light always travels at the same speed; moreover, the speed of light is the only fixed quantity that is always the same regardless of the conditions under which it is measured. Albert Einstein reasoned that the light beams had not encountered any obstacles as they sped through space because it is impossible to detect absolute motion in the universe by any experiment, no matter how carefully contrived. He declared that there was nothing absolutely at rest on earth or anywhere else in the universe; everything is continually in motion—from atoms too infinitesimal to be seen through the most sensitive microscope, to stars too distant to be perceived through the most powerful telescope. In such a universe, where all is motion and nothing is fixed, everything is relative to the circumstances under which it is observed.

10 The concept of relativity was by no means a novelty, but scientists had always believed that certain facts of the physical world were *absolute* and would not change under any circumstances; in measuring length, weight, and speed, a physicist assumed that the yardstick, the scales, and the clock gave correct answers. Einstein's theory became an international sensation because it applied the concept of relativity to the exact science of physics. He became known as the man who had slowed down the clocks, shrunk the yardsticks, and changed the scales. His reputation grew as, one after another, his theories were proved in the laboratories of other scientists.

11 One of the most familiar examples of relativity is that of moving objects: to a passenger on a moving train, the seats and other furnishings in the interior of the railroad car appear stationary, while the landscapes outside seem to whiz past; but to a farmer plowing a field near the tracks, it is the train that hurtles by, and the trees that stand still. As the train speeds on at sixty miles per hour, the earth is circling the sun; simultaneously the entire solar system is moving in the direction of a remote star. A person standing on the sun and looking through a giant telescope would observe the earth and the train moving below; another observer on the nearest fixed star, four light-years away, would four years later see the sun, the earth, and the moving train traveling together through space, all these motions being relative to the position of the observer.

12 If motion through space is relative, what about relativity of time? Every physical object has three dimensions, but inasmuch as everything actually moves and changes, the world actually exists in three dimensions of space plus a fourth dimension—the fourth dimension being, according to Einstein's theory, time. In the universe he has hypothesized, neither time nor space continues indefinitely; both change relative to the position and traveling rate of the observer.

13 We compute days by the earth's revolution on its axis, and years by the earth's annual journey round the sun; because Jupiter, for example, takes longer to circle the sun, a year on Jupiter is longer than a year on earth. In frontier days, it took a covered wagon a year to complete the three-thousand-mile journey from San Francisco to New York City; today a jet plane crosses the continent in less than five hours. If we could accomplish the impossible and travel with the speed of light, there would be no time—everything would happen at once. As we approached the incredible speed of light, not only our watches but our pulses would slow down; even the whirling electrons inside the atom would move increasingly slower. If we could travel faster than light we could actually move backward in time like the heroine of the popular limerick:

> There was a young lady named Bright
> Whose speed was faster than light;
> She set out one day
> In a relative way
> And returned home the previous night!

14 It was once believed that matter and energy were completely different, that matter was something solid, like rock, whereas energy measured how rapidly an object moved or what it could do. Einstein demonstrated that actually there is an exceedingly close relation between matter and energy; the electron that moves with half the speed of light has terrific energy because it moves so rapidly, and this motion increases its weight, for the energy has been converted into matter.

15 Of enormous consequence is the fact that matter can also be converted into energy. Einstein was actually able to give a measurement for the amount of energy that is contained in any particle of matter; his famous formula is $E = mc^2$, E referring to energy, m standing for mass (or the weight of the matter), and c^2 referring to the speed of light multiplied by itself. Thus Einstein's formula signifies that the energy in every piece of matter equals the mass or weight of the

matter multiplied by the speed of light times the speed of light.

16 The speed of light is 186,300 miles per second; multiply this figure by itself and you will have some conception of what a prodigious amount of energy can be extracted from a minute piece of matter.

17 One striking application of Einstein's astounding formula is in explaining the mystery of how the sun has been able to distribute light and heat to the solar system for billions of years without burning itself out: some of the sun's atoms are constantly being transformed into energy. Another application is the atomic bomb, which by releasing the energy contained in matter ushered in the nuclear age.

HOW WELL DID YOU READ?

Did you see the reasons?

1. **Michelson and Morley were baffled because their measurements**
   - **A** varied from one experiment to another
   - **B** contradicted an accepted fact
   - **C** indicated that light did not move
   - **D** disagreed with those obtained by others

2. **Einstein demonstrated that the Americans had difficulty because they**
   - **A** did not have a precise enough apparatus
   - **B** tried to measure something that cannot be measured in experiments
   - **C** did not make enough measurements
   - **D** used a wrong figure in their calculations

Did you understand the important facts?

3. **According to Einstein's theory, everything in the universe is**
   - **A** constantly in motion
   - **B** absolutely fixed
   - **C** motionless under some conditions
   - **D** moving at the speed of light

4. **Einstein's theory startled physicists because**
   - **A** they had not known the concept of relativity
   - **B** they had never thought of physics as an exact science
   - **C** their yardsticks and scales became useless
   - **D** they learned that measurements could not be absolute

5. **If one could travel at the speed of light, time would**
   - **A** be the only fixed quantity
   - **B** repeat itself
   - **C** pass very rapidly
   - **D** cease to exist

Did you understand what you read?

6. **The four dimensions Einstein hypothesized are**
   - **A** length, width, depth, time
   - **B** space, speed, light, depth
   - **C** energy, matter, mass, speed
   - **D** time, space, energy, matter

7. **The limerick in paragraph 13 is intended to**
   - **A** describe an event that might well happen
   - **B** point up a basic flaw in Einstein's theory
   - **C** present a ludicrous distortion of the theory of relativity
   - **D** clarify a single part of Einstein's theory

Can you draw the right conclusions?

8. **According to Einstein's theory about matter and energy, a fast-moving baseball has**
   - **A** more weight than a slow-moving one
   - **B** less weight than an unmoving one
   - **C** less energy than a slow-moving one
   - **D** none of the above

9. **The fact that matter can be converted into energy explains**
   - **A** how the atomic bomb releases energy
   - **B** why the sun has not burned out
   - **C** both **A** and **B**
   - **D** neither **A** nor **B**

10. **The author probably believes that the average person**
    - **A** has a duty to learn about scientific discoveries
    - **B** should leave science to the scientists
    - **C** has held back science through indifference
    - **D** can contribute to scientific knowledge

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. discerning *(6)*
2. tending toward drastic change *(7)*
3. clever; original *(7)*
4. noticeable *(8)*
5. incapable of being disproved *(8)*
6. frustrating; puzzling *(8)*
7. exceedingly small *(9)*
8. at the same time *(11)*
9. theorized; supposed *(12)*
10. enormous *(16)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. issue *(3)*
    - **A** question
    - **B** publication
    - **C** offspring

12. anticipated *(8)*
    - **A** done in advance
    - **B** expected
    - **C** prevented

13. remote *(11)*
    - **A** distant
    - **B** slight
    - **C** secluded

14. position *(11)*
    - **A** posture
    - **B** location
    - **C** opinion

15. extracted *(16)*
    - **A** selected
    - **B** extorted
    - **C** derived

C. *esce* (to become)

escent (beginning to be; in the process of)

escence (a becoming; state of becoming)

A knowledge of these **suffixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the suffix *-esce, -escent,* or *-escence* to complete each word so that it fits the definition. Write the word.

16. adol_____ (in the process of becoming an adult)
17. adol_____ (state of becoming an adult)
18. coal_____ (grow together)
19. lumin_____ (state of giving off light)
20. lumin_____ (in the process of giving off light)
21. conval_____ (in the process of recovering from an illness)
22. conval_____ (become well)
23. conval_____ (period of recovery from an illness)
24. obsol_____ (in the process of becoming out of date)
25. evan_____ (state of vanishing)

D. Figures of speech are used to make language richer and more vivid. Two devices that are often used to add color to language are **hyperbole** and **understatement.** Hyperbole is exaggeration for effect, not meant to be taken literally: "This rock is as old as time." Understatement is the opposite of hyperbole; it minimizes for effect: "This rock has been around for a few years."

Directions: These statements and quotations are either hyperbole or understatement. Write *hyperbole* or *understatement* for each.

26. It is not very courteous to poison a guest.
27. Every other building in New York City is a skyscraper.
28. "The English winter—ending in July,
    To recommence in August . . ."
29. "Boston State-House is the hub of the solar system."
30. "God made the wicked Grocer
    For a mystery and a sign
    That men might shun the awful shop
    And go to inns to dine."
31. London is a village of some size.
32. "A thousand apologies for the intrusion."
33. My sore throats are always worse than anyone's.

5 The Music of Ellen Zwilich

by Tim Page

Courtesy of Britain Hill

1 "Do you remember those time-lapse photography films they used to show in high-school biology classes?" Ellen Taaffe Zwilich enquires. "Years of growth were compressed into a couple of minutes. First you saw a root, then a sprout, then suddenly the tree began to grow branches, reaching out in every direction, as if it were dancing. Composers grow the same way. We twist upward, while trying to keep our roots and balance."

2 It's lunchtime, and Mrs. Zwilich, the first woman to win the Pulitzer Prize for musical composition, has shelved her pencils and music paper for the day. She does the majority of her composing in the morning, she explains. "Music has been running through my subconscious all night, so when I get up, I turn off the phone and become unavailable. And then I work, until my instincts tell me it's time to stop."

3 Mrs. Zwilich—open, friendly, unpretentious and almost disconcertingly without any apparent neurosis—doesn't fit the standard image of a classical composer as a recluse in a garret waiting for the muse. "Does the public have any image of composers at all?" the blonde, blue-eyed musician wonders. "I think most people are under the impression that classical music is something written by dead people.

4 "American classical composers are shadow figures, and the general public is almost completely unaware of us. Go out on the street and ask someone to name five living American classical composers. Maybe, just maybe, Aaron Copland will get mentioned, or maybe Philip Glass, but then you'll get a blank look."

5 A growing number of musically aware people might add Zwilich's name to the list, because, since she won the Pulitzer Prize for her Symphony No. 1 in 1983, interest in her music has increased considerably. Now, having neared the mid-century mark, she has created a handful of exquisitely honed works in a variety of mediums from string trio to symphony. She writes in an idiosyncratic style that, without ostentation or gimmickry, is always recognizably hers. In her early works, one hears the influence of many composers: Her String Quartet (1974) blends the knotty intensity of Bela Bartok with the languorous emotionalism of Alban Berg. In her later music, one finds a clear, logical, and seemingly inevitable structure—arching, charged melodic lines, aggressive rhythms, and a prismatic combination of instrumental colors.

6 Zwilich, the daughter of an airline pilot, has been composing since elementary school, when she would simply make up pieces on the piano and play them again and again. She didn't write anything down until she was about ten and began studying with the neighborhood piano teacher in Miami, where she was born and brought up. "It was an unhappy relationship," she remembers, "because the teacher made me play all these silly children's pieces, and I thought my own compositions were better."

7 By the time she was a teenager, Zwilich was proficient on three instruments—piano, violin, and trumpet. She composed a high-school fight song, was the concertmaster of the orchestra, first trumpet in the band, and a student conductor as well. She continued composing, and, by the age of eighteen, she was turning out full-scale orchestral works.

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8 Mrs. Zwilich attended Florida State University in Tallahassee, where she majored in composition, and while there, she played in an orchestra for conducting classes given by the late Ernst von Dohnanyi, a highly respected Hungarian pianist and composer. "Dohnanyi was essentially a nineteenth-century European artist—very Old World—and I was glad to be exposed to that sensibility."

9 She received her master's degree from Florida State in 1962, and after one dreary year teaching in a small town in South Carolina, moved to New York to continue her violin studies with Ivan Galamian (who taught, among others, Itzhak Perlman, Pinchas Zukerman, and Michael Rabin). She quickly established herself in the ranks of New York's free-lance violinists, and also spent a season working as an usher at Carnegie Hall. In addition, during this time she played in the violin section of the American Symphony Orchestra, under the direction of Leopold Stokowski, where she remained for several years.

10 "I was already aware that I wanted to compose more than I wanted to play. Composers, however, need some kind of hands-on experience, either as conductors or players, because if you know the orchestral repertory only from studying scores and listening to finished performances, you can't really tell all that's going on in the music. A score is, at best, an indication, rather than a final product, and playing in the orchestra allowed me a firsthand experience of the subtleties that fall between score and performance. I was always listening to the variety of sounds the orchestra made—the problems different instruments had in different registers, the details of the ensemble sonorities." While with the American Symphony, she met and married Joseph Zwilich, a fellow violinist and a member of the Metropolitan Opera Orchestra.

11 In 1970, Zwilich entered the Juilliard School of Music to study composition with Roger Sessions and Elliot Carter, two well-regarded professionals who proved immensely helpful in her development, allowing her independence yet teaching her everything they knew.

12 In 1975, she became the first woman to earn a doctorate in composition from Juilliard. Shortly thereafter, Pierre Boulez programmed her "Symposium for Orchestra" (1973) in New York, and she began to receive awards, commissions, and critical praise. She produced a String Quartet (1974), a Sonata in Three Movements for Violin and Piano (1973–1974), and the "Chamber Symphony" in 1979.

13 Tragically, also in 1979, Mrs. Zwilich's husband suddenly died from a massive heart attack. "It's still very difficult for me to listen to the 'Chamber Symphony,'" Zwilich explains, "for I had begun writing it before Joe died, and when I came back to complete it, everything had changed. It was a crucible of sorts. I loved Joe very dearly, and miss him to this day, yet his death taught me nothing so much as the joy of being alive—the joy of breathing, walking, feeling well, swimming, the joy of being human. Suddenly all talk of method and style seemed trivial, and I became interested in meaning. I wanted to *say* something, musically, about life and living."

14 Mrs. Zwilich compares the beginning of a new composition to the armature of a sculptor —a general sort of skeletal mold, with a few details in order. She begins with a substantial amount of musical material, sketched over a period of time—motives; themes; harmonic, structural, and dramatic ideas; and a vague conception of form. Then she fleshes the music out, improvising on piano and violin, and working with the notes on paper.

15 Inspiration provides raw material, and then, as Zwilich works with what she has already written, the music evolves. "Inspiration engenders product, which, in turn, engenders more inspiration," she says. "Once I'm into a piece, it starts to feed back into me."

16 Zwilich contends that being a composer is similar to being a playwright who, of course, creates the characters in the play, but after a while, sees the characters begin developing a life of their own. "By the time Act I is over, the playwright pretty much knows what George would or would not say to Martha, and proceeds accordingly, with some sensitivity to dramatic context. After a certain point, a composer's job is to be a good listener—you listen to what's gone before, and then decide how to continue."

17 Each of Zwilich's compositions has had a unique genesis. "I heard the first fifteen bars of my symphony immediately," she recalls, yet all she knew about her work in progress was that she wanted to create something that would exploit the rich sonorities of the American Composer's Orchestra. Then, she recalls, she heard the first fifteen bars of the symphony immediately.

18 Zwilich also has an amusing story to relate about the creation of her string trio. "A friend I hadn't seen in quite a while called me, and asked if I would be interested in doing a work for their first concert. I said that I didn't have the time, but we kept talking for a while, and during the conversation I started to hear music. The trio was already beginning to take shape in my head. So I said I'd think it over, and I did, throughout the rest of the day, and I guess, throughout the evening as well. In any event, I woke up the next morning, and the whole opening section was waiting to be written down."

19 Another composition was taking shape; the tree, unfettered, began to dance.

HOW WELL DID YOU READ?

Did you note the comparisons?

1. **Mrs. Zwilich's comparison of the growth of a composer with the growth of a tree is a**
   - **A** simile
   - **B** personification
   - **C** pun
   - **D** metaphor

2. **Mrs. Zwilich compares the beginning of a new composition to the**
   - **A** evolution of a drama
   - **B** armature of a sculptor
   - **C** construction of a skyscraper
   - **D** All of the above

3. **The author suggests that, compared to the common image of a composer, Zwilich is more**
   - **A** reclusive and eccentric
   - **B** neurotic and conceited
   - **C** outgoing and modest
   - **D** logical and intellectual

Can you draw the right conclusion?

4. **Zwilich seems to think that classical composers should be**
   - **A** better known by the public than they now are
   - **B** compensated better than they presently are
   - **C** given more support by the federal government
   - **D** more productive than they presently are

5. **From the description of Zwilich's high school work, the reader can conclude that she probably was a**
   - **A** bright student with only minor interest in music
   - **B** single-minded student who concentrated only on classical music
   - **C** disinterested student until she discovered Mozart
   - **D** versatile student with several interests

6. **We can conclude from the article that Zwilich's style is**
   - **A** vaguely similar to others' but uniquely her own
   - **B** romantic in the manner of Mozart and Beethoven
   - **C** exceptionally similar to Aaron Copland's
   - **D** unlike any other composer's

7. **Zwilich felt that the death of her husband influenced her to**
   - **A** appreciate her special talents even more
   - **B** cherish life more than ever
   - **C** create music he would have liked
   - **D** take a six-month break from composing

Did you note the author's style?

8. **The author acquaints the reader with Zwilich mainly by**
   - **A** using a series of direct quotations
   - **B** comparing her with other famous composers
   - **C** relating several humorous incidents
   - **D** describing her personality and music in detail

How carefully did you read?

9. **After the death of her husband, Zwilich became less concerned with technique and more concerned with**
   - **A** harmonies
   - **B** variety
   - **C** meaning
   - **D** length

10. **Zwilich contends that composers are similar to playwrights in that**
    - **A** their work is first committed to paper
    - **B** the works of both are meant to be heard aloud
    - **C** the compositions of both are always the result of intense mental activity
    - **D** their creations themselves turn around to influence the creator

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. mental processes operating just below full awareness *(2)*
2. unfinished room just under a roof; loft *(3)*
3. sharpened; refined *(5)*
4. distinctive; very unusual *(5)*
5. quiet and slow-moving *(5)*
6. severe test *(13)*
7. composing; creating on the spur of the moment *(14)*
8. causes; brings forth *(15)*
9. beginning; origin *(17)*
10. full and impressive sounds *(17)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. branches *(1)*
    - **A** divisions of a river
    - **B** secondary shoots or stems of a plant
    - **C** divisions of an organization

12. open *(3)*
    - **A** frank; unreserved
    - **B** exposed; uncovered
    - **C** unfilled; still available

13. general *(4)*
    - **A** vague; not detailed
    - **B** high ranking; holding superior rank
    - **C** common; not special

14. mediums *(5)*
    - **A** things in a middle position
    - **B** go-betweens; intermediaries
    - **C** modes of artistic expression

15. characters *(16)*
    - **A** eccentric persons
    - **B** persons in a drama
    - **C** letters of the alphabet

C. *multi* (many; more than two; many times more than)
mega (large; great; powerful; a million times)
omni (all; every)

A knowledge of these **prefixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the prefix *multi-*, *mega-*, or *omni-* to complete each word so that it fits the definition. Write the word.

16. _____phone (large, cone-shaped device for magnifying the voice)
17. _____cycle (one million cycles, as in radio)
18. _____present (existing everywhere)
19. _____ply (cause to increase in number)
20. _____lomania (delusions of grandeur and power)
21. _____scient (knowing everything)
22. _____ton (force equal to the explosion of a million tons of TNT)
23. _____millionaire (a millionaire many times over)
24. _____tude (a crowd of many persons)

D. An **idiom** is a phrase or expression that has an accepted meaning different from its literal meaning. Idioms have various origins; many have entered current speech from the language peculiar to an occupation, profession, locality, or sport.

Directions: The idioms in column II are some of the many which originated on farms or in rural areas. Write the idiom that corresponds with each definition in column I.

I	II
25. to be master	put the cart before the horse
26. precipitating heavily	rule the roost
27. tend to one's own affairs	come home to roost
28. a difficult task or situation	have all one's eggs in one basket
29. not having chosen a side	plow a lonely furrow
30. have all one's interests concentrated on one thing	raining pitchforks
31. proceed on a course alone	on the fence
32. do things backward	hard row to hoe
33. have repercussion; boomerang	hoe one's own row

6

A Word to Moonstruck Poets

(POETIC LICENSE VS. NATURAL LAW)

by Simone Daro Gossner

1 Once they've discovered that "moon" rhymes with "June," poets throughout the ages have seemingly forgotten everything else about our neighboring heavenly body and proceeded to write countless lines about the moon—without checking the facts.

2 Witness these lovely lines from "The Rime of the Ancient Mariner," first published in 1798, by Samuel Taylor Coleridge:

> From the sails the dew did drip—
> Till clomb above the eastern bar
> The hornèd Moon, with one bright star
> Within the nether tip.

3 From a literary standpoint, these lines are a compact gem of descriptive writing, from the clever alliteration of "the dew did drip" to the vivid picture of the rising moon; astronomically, with all due respect to their author, they are nothing less than a monstrosity.

4 After the shooting of the albatross, the ship has traveled southward and is now in tropical waters, as intimated by the short duration of twilight described in the lines:

> The Sun's rim dips; the stars rush out:
> At one stride comes the dark.

Now, in the tropics, the crescent of the moon appears horizontal; therefore, there are left and right tips, but certainly no "nether" one. Worst of all is the idea of the star within the crescent; a crescent is all one *sees* of the moon, because it is the only part illuminated by the sun, but the remainder of the moon is always present, although invisible; therefore, no star could be observed inside the crescent, as the dark portion of the moon hides that segment of the sky. This is only one example of a classic error so common that it may be found even on the Turkish flag!

5 There is possibly another error in the poem: the context is a little vague

Based on "The Moon and the Poet" by Simone Daro Gossner.

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in this respect, but so much happens in the narrative after the moon has ascended that one would assume it rose during the first half of the night—if this was the case, the moon could not possibly have been "hornèd" at all; it had to be full or at least approximately so. At this point, let's give the author the benefit of the doubt and merely pretend that the "dew did drip" for at least six hours after sunset—or could it?

6 Several years later, the Reverend Charles Wolfe, a contemporary of Coleridge, also was responsible for a mistake involving the moon, although this one is not obvious from the context. In "The Burial of Sir John Moore at Corunna," he writes:

> We buried him darkly at dead of night,
> . . . . . .
> By the struggling moonbeam's misty light.

7 The British armies were defeated at Corunna, Spain, on January 16, 1809; Sir John Moore was killed while covering the retreat of the British to their ships, and was buried in the ramparts of the city before sunrise on January 17. No wonder the moonbeam was struggling: it was coming from the far side of the moon, and in a curved path, too. A new moon had occurred near midnight on the night before the battle; the moon was less than two days old at the time of the burial, and the slender crescent would have been practically impossible to see because of its proximity to the sun and, in any case, would have arisen about one hour *after* sunrise.

8 In May 1841 *The Graham's Lady's and Gentleman's Magazine* of Philadelphia published a story entitled "A Descent into the Maelstrom," by Edgar Allan Poe; it was soon to become one of his best-known stories, often quoted in anthologies, and unquestionably a masterpiece of suspense by a master of that art. The story, of course, is purely fictional. The gripping narrative describing the descent into the abyss willfully contradicts the law of gravity, a fact with which we do not intend to quarrel; however, in order to lend it an aura of authenticity, Poe sprinkles the narrative with detailed references to the date and place of the event, and—woe betide him—to the position of the moon. Unfortunately, Mr. P. neglected to check his facts, and here the fun began.

9 The date was July 10, the place was "close to the Norwegian coast—in the sixty-eighth degree of latitude. . . ." As the ship approached the Maelstrom, the skipper looked up and saw the full moon "with the greatest distinctness"; a little later he consulted his watch "by the moonlight"; as he eventually made it to port, "the full moon was setting radiantly in the west."

10 The incontrovertible fact is that on July 10 the sun will not set at all at latitude sixty-eight north; there is no night, or even twilight, and certainly no need of moonlight by which to read one's watch. Furthermore, at that latitude an object seen nearly overhead will never set, radiantly or otherwise; it will never even approach the horizon. Finally, a full moon in the middle of July would be somewhere between nineteen and twenty-six degrees south of the celestial equator, so that it would barely rise above the horizon at latitude sixty-eight north, and in some years it would not rise at all.

11 As the story ends, the skipper is picked up by some fishermen, and says, "I told them my story—they did not believe it. Now I tell it to you, and I can scarcely expect you to put more faith in it than did the merry fishermen of Lofoden." That old moon gave him away, that is why.

12 The following paragraphs are intended as a brief primer for poets everywhere who have discovered the "moon-June" rhyme and never bothered thereafter to check their facts or look further into any of the moon's other peculiarities.

13 The moon at first quarter reaches the meridian at approximately 6 P.M. local standard time, and sets around midnight. The full moon reaches its meridian at about midnight; it rises in the east approximately at sunset and sets in the west approximately at sunrise. The moon at last quarter rises around midnight and reaches the meridian about 6 A.M. The new moon, which one cannot see, is on the meridian at noon, rising and setting with the sun.

14 All this is derived from the fact that the new moon lies in the direction of the sun, while the full moon is in the part of the sky directly opposite from the sun. The moon at first quarter is ninety degrees (or "one quarter of the sky") to the east of the sun, and the moon at last quarter is ninety degrees to the west of the sun; for that reason, a crescent moon can *never* be seen rising or setting with the sun. If the moon rises after sunset but before midnight, its phase is somewhere between full and last quarter, and it will appear round or nearly round; conversely, if the moon rises after midnight but before sunrise, its phase is between last quarter and new, and it will be crescent-shaped. If, at North American latitudes, one sees a crescent moon in the first

half of the night, it is a waxing moon and has to be in the western sky, because it will set before midnight; similarly, a crescent moon seen in the last half of the night is a waning moon and has to be in the eastern sky, because it will not reach the meridian until after sunrise.

15 The terms *noon* and *midnight* as used here must be taken somewhat loosely, because the standard or zone time by which we live may differ by as much as half an hour from the true local time, and also because, in general, the exact phase will not occur precisely when the moon is on the local meridian.

16 In describing the appearance of the moon, one must remember also that it receives its light from the sun; therefore the illuminated side of the moon's surface is invariably nearer the sun. Similarly, the cusps (or tips, as Coleridge describes them) always point away from the sun, and the line joining the cusps is perpendicular to the line joining the centers of the sun and moon. Consequently, in the tropics, where the sun rises and sets almost vertically, the crescent moon appears nearly horizontal.

17 So, poets and writers, take heed when singing your praises of and setting your stories to scenes illuminated by the moon above; be sure the moon you describe has, at least, the right to be there.

HOW WELL DID YOU READ?

Did you understand what you read?

1. **In Coleridge's poem, "the hornèd moon" refers to the**
   - **A** polished look of the full moon
   - **B** shape of the crescent moon
   - **C** irregular surface of the moon
   - **D** position of the star at the moon's tip

2. **Wolfe's error in regard to the moon is revealed when we**
   - **A** read contradictory facts elsewhere in the poem
   - **B** study the historical circumstances surrounding the incident he described
   - **C** observe how a full moon looks
   - **D** merely read the two incorrect lines

3. **The error that occurred in "A Descent into the Maelstrom" would have been avoided if its author had**
   - **A** omitted mention of the latitude
   - **B** chosen to set the story in a land that was farther north
   - **C** described a crescent moon instead of a full moon
   - **D** had his moon set in the east

How did the writer organize her material?

4. **This article falls naturally into two sections, which could be titled**
   - **A** Examples of Errors; Information for Writers
   - **B** Errors in Poetry; Errors in Prose
   - **C** Introduction; Famous Errors
   - **D** Poetry and Science Agree; Poetry and Science Disagree

5. **The three writers discussed in the article are dealt with in**
   - **A** order of the magnitude of their errors
   - **B** order of their popularity
   - **C** order of their skill as poets
   - **D** chronological order

Can you apply what you have read?

Referring to the article if necessary, decide whether or not the statements below could be astronomically correct. Write *yes* or *no*.

6. The moon is at its highest point at midnight; it is full.

7. One of the characters in a story observes the new moon almost directly above him at 6 A.M.; it is winter.

8. In a story you are writing, the moon rises just after sunset; it is a waning moon, between full and last quarter.

9. Your character is in Boston; he sees a crescent moon at 10 P.M.; it is in the western sky.

10. You describe a full moon in the arctic summer; the moon rises but does not come very far above the horizon.

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. nearness *(7)*
2. collections of stories *(8)*
3. atmosphere *(8)*
4. genuineness *(8)*
5. happen to *(8)*
6. undeniable *(10)*
7. highest point in a daily course *(13)*
8. growing gradually larger *(14)*
9. at right angles *(16)*
10. in a straight-up-and-down manner *(16)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter of the meaning you choose.

11. intimated *(4)*
    - **A** made known
    - **B** implied
    - **C** announced

12. nether *(4)*
    - **A** lower
    - **B** under
    - **C** underground

13. respect *(5)*
    - **A** feeling of esteem and honor
    - **B** particular point
    - **C** courteous regard

14. peculiarities *(12)*
    - **A** behavior patterns
    - **B** habits
    - **C** odd traits

15. derived *(14)*
    - **A** deduced
    - **B** extracted
    - **C** originated

C. *cy* (quality, condition, state, or fact of being; position, rank, or office of)
ure (act or result of an action; agent or instrument of action; state of being)
urgy (fabricating or working of)
mancy (divination; fortunetelling)

A knowledge of these **suffixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the suffix *-cy, -ure, -urgy,* or *-mancy* to complete each word so that it fits the definition. Write the word.

16. pyro_____ (divination by means of fire)
17. metall_____ (metalworking)
18. hesitan_____ (state of being cautious or hesitant)
19. hal_____ (working of salt)
20. creat_____ (result of act of creation)
21. chiro_____ (fortunetelling by reading palms)
22. cura_____ (state of holding the office of curate)
23. ten_____ (state of holding an office)
24. zym_____ (working in the art of brewing or wine making)
25. frequen_____ (fact of occurring often)

D. Figures of speech are used to make language richer and more vivid. Two devices that are often used to lend color to language are **hyperbole** and **understatement.** Hyperbole is exaggeration for effect, not meant to be taken literally: "This rock is as old as time." Understatement is the opposite of hyperbole; it minimizes for effect. "This rock has been around for a few years."

Directions: These statements and quotations are either hyperbole or understatement. Write *hyperbole* or *understatement* for each.

26. There is food enough for an army on this table.
27. "It would be superfluous in me to point out to your lordship that this is war."
28. "The almighty dollar is the only object of worship."
29. "I do not cough for my own amusement."
30. "The whale that wanders 'round the pole
    Is not a table fish."
31. He has an army of friends.
32. "Our severest winter, commonly called the spring . . ."
33. "I shoot the hippopotamus with bullets made of platinum,
    Because if I use leaden ones, his hide is sure to flatten 'em."

Why I Love Wisconsin

by Frank Lloyd Wright
(1869–1959)

1 I love Wisconsin because my staunch old Welsh grandfather with my gentle grandmother and ten children settled here nearby. I see the site of their old homestead and the homesteads of their offspring as I write; offspring myself, my home and workshop are planted on the ground Grandfather and his sons broke before the Indians had entirely gone away.

2 This Wisconsin valley with the spring-water stream winding down as its center line has been looked forward to by me and mine from all over the world as home. I come back from the distant, strange, and beautiful places I used to read about when I was a boy, and wonder about, with the feeling that there is nothing anywhere better than this. Surroundings are more dramatic elsewhere, perhaps stranger, grander, more thrilling, too, but there's nothing that picks you up in its arms and so gently, almost lovingly, cradles you as do these gentle southwestern Wisconsin hills—these ranges of low hills that make these fertile valleys by leading down to the great sandy plain that was once the bed of a mightier Wisconsin River than any of us have ever seen. I doubt that that vast river flood was ever more beautiful than this wide, slow-winding, curving stream in its broad sand bed, where gleaming sandbars make curved beaches and shaded shores to be overhung by masses of great greenery. It is not quite like any of the more important rivers of the world; it is more what specialists in scenery would call picturesque but it is, nevertheless, unique.

3 And the Wisconsin red barn! Wisconsin barns are mostly all red, and everywhere constitute a feature of the landscape missing in most states; a farmstead here is somehow warmed and given life by the red of the barns scattered about on the green hills and among the yellow fields with the sun on them. And then Wisconsin is a dairy state—that means herds of pure Holsteins or Guernseys, or what have you, occupying the best ground anywhere around, making pictures that complement the one made by the red barn. Wisconsin, fond of passing laws, should pass another one compelling every farmer to paint his barn red, and yet another requiring him to pasture his cows by the highway and his pigs back behind the barn.

4 A good solid state, our state—extremely beautiful physically, a veritable playground for humanity in summer, with an individuality not to be found elsewhere. I have found out, too, that we are known abroad as a "progressive" state; many persons outside the United States are familiar with the names of those who have helped make Wisconsin outstanding for its scientific, political, and agrarian advances. I too always speak of Wisconsin as "progressive" when

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I talk about her away from home, not understanding precisely what the word means—any more than do most other Wisconsin people, I suppose. But that is what Wisconsin would like to be anyway, and what she means to be, which is most important after all.

5 I love Wisconsin's hopes, her beauty, her honesty, her individuality; these qualities, impressed on me as a boy, had a profound effect on the philosophy that directed my career.

6 When I was a young architect living in a Chicago suburb, a certain type of dwelling had somehow become typical American architecture, although by any faith in nature, implicit or explicit, it did not belong anywhere. It had no sense of unity, space, or proportion; it had little sense of earth, beginning somewhere way down in the wet and ending as high up as it could get. To take any one of these so-called homes away would have improved the landscape and helped to clear the atmosphere. They were bedeviled boxes with fussy lids, complex boxes that had to be cut up by all kinds of holes to let in light and air, with especially ugly holes to go in and come out of; architecture seemed to consist in what was done to these holes.

7 All this I saw around me seemed affected, nonsensical, or profane. My first feeling was hunger for reality, for sincerity, for the simplicity that would yield a broader, deeper comfort. In me there was a growing idea of simplicity as organic—an idea I had been born into and trained in. Organic simplicity might be seen everywhere, producing significant character in the harmonious order I was taught to call nature. I had been more familiar with it on the Wisconsin farm, where all around me I might see beauty in growing things, and with a little effort learn how they grew to be "beautiful." None were ever insignificant. Instinctively I loved the prairie as simplicity itself; the trees, flowers, and sky were thrilling by contrast. I saw that anything with a little height looked quite taller on the prairie; every detail of height becomes intensely significant there, but all breadths fall short.

8 When men and women built on the prairies, however, this tremendous spaciousness was needlessly sacrificed, all cut up crosswise or lengthwise into twenty-five- or fifty-foot lots; space was reduced to a money matter, with salesmanship parceling out the ground and selling it with no restrictions. Everywhere in a great, new, free country, I could see only this mean tendency to tip every structure up edgewise instead of letting it lie comfortably flat on the ground, where spaciousness was a virtue.

9 I had an idea that the planes parallel to the earth in buildings identify themselves with the ground, making the buildings belong to the earth; I felt that every house in a low region should begin *on* the ground, rather than *in* it. Putting these ideas to work, I devised a house at ground level, eliminating the damp basement. Another idea, that shelter should be the essential look of any dwelling, was responsible for my adding the low spreading roof with generously projecting eaves. These various feelings, all taking the same direction, make it apparent that I was born an American child of the ground and of space; welcoming spaciousness as a modern human need; the farm had no negligible share in developing this sense of things in me, I am sure.

10 Taliesin, my home, has received architectural pilgrims from all over the world; the pilgrims have gone home and written in their newspapers and magazines and books about America as they discovered it hidden away in a rural nook in southwestern Wisconsin. In this nook is our busy workshop, out of which have come plans for buildings that have established new ideals in architecture and carried new principles of engineering into effect. The American people need only to know that they *can* build *real* buildings. We would like to hold and consolidate all these gains for Wisconsin; we are trying to do this by establishing a larger industrial workshop near here for young people who want to be American artists. Students are awakening to a lively interest in this matter. Perhaps the state university itself might take an interest—but that interest might, after all, stultify our own enjoyment in a fresh endeavor and get us mixed up with senators and assemblymen and committees and regents, and wear us all away with nothing done. Our social system is like that, unfortunately; yes, even in Wisconsin.

11 Why does any real progress have to overcome so much resistance? Why do we need so many first-class funerals to get anything sensible done, if it is "unusual"? Some day Wisconsin will be so progressive that she will consider the fine arts not only as essential as politics, science, or farming, but even more fundamental to any state that would live "above the belt."

12 Getting back to why I love Wisconsin . . .

13 I love Wisconsin because of every sincere, forward-looking experiment the state itself has ever made, whether it succeeded or not; because

of her courage, her love of independence, her true belief in individuality. I love Wisconsin because I am by birth and nature a Wisconsin radical. *Radical* is a fine word meaning "roots"; being radical, I must strike root somewhere, and Wisconsin is my somewhere; I feel my roots in these hillsides as I know those of the oak that have struck in here beside me—and that oak and I understand each other. Wisconsin soil has put sap into my veins, and I should love her as I love my forebears, and as I love my work.

HOW WELL DID YOU READ?

Can you recognize style?

1. The author writes as if he were

A seeking precise words to convey a subtle meaning
B making an orderly outline of ideas
C primarily concerned with imparting information
D thinking random thoughts aloud

2. The author's style of writing resembles his architectural style; it is

A radical yet pleasing
B natural and functional
C not at all decorative
D overly ornate

3. Wright's description of Wisconsin scenery can best be characterized as

A frankly sentimental
B objective yet sensitive
C professionally critical
D humorless

What does the author think?

4. Wright's reservation about his state was that it

A is picturesque rather than dramatic
B is too far from the architectural centers of the world
C has not been progressive enough
D does not offer much opportunity for young people

5. Wright's major criticism of the architecture of a Chicago suburb was its

A lack of harmony with natural surroundings
B failure to recognize need for height
C inability to utilize small lots
D faulty physical construction

Did you understand what you read?

6. "First-class funerals" in paragraph 11 refers to

A old, proven ideas that were abandoned
B failures of traditionalists
C expensive but meritless projects
D progressive experiments that failed

7. When he refers to a state "living above the belt," the author probably means

A adapting to conditions in the North
B playing fair however hard the battle
C appreciating things of the heart and mind
D being in a particular geographical area

8. The paragraph on the meaning of *radical* illustrates that

A the author is rootless compared to the oak
B Wisconsin is a vital part of the author
C there is a similarity between architecture and natural growth
D the author thinks politics important

Can you draw the right conclusions?

9. Wright's suggestion that Wisconsin pass the laws mentioned in paragraph 3 was a

A lighthearted jest
B serious proposal
C bitter protest
D pointed ridicule

10. The author would probably advise a young architect today to

A reject the idea of creating a typical American architecture
B adapt architecture to the social system in which it functions
C relate the form and function of architecture to living things
D find his individual style early and create only structures that mirror it

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. strong; trustworthy *(1)*
2. actual *(4)*
3. agricultural *(4)*
4. implied though not plainly expressed *(6)*
5. feigned; artificial *(7)*
6. characteristic of living organisms *(7)*
7. unimportant *(9)*
8. combine into one; make strong *(10)*
9. make absurd or worthless *(10)*
10. earnest attempt *(10)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. humanity *(4)*
    - **A** human beings
    - **B** kindness
    - **C** human nature

12. fussy *(6)*
    - **A** needing careful attention
    - **B** complaining
    - **C** overelaborate

13. mean *(8)*
    - **A** humble
    - **B** petty
    - **C** average

14. identify *(9)*
    - **A** make known
    - **B** associate
    - **C** recognize

15. nature *(13)*
    - **A** country surroundings
    - **B** force that regulates the universe
    - **C** inborn character

C. Some **roots** that appear in many English words are

incend, incens (burn)
ignis (fire)
scintill (spark)
pyr (fire)
ciner (ashes)

All of these come to English from Latin, with the exception of *pyr,* which is Greek.

Directions: The words in column II are based on the roots listed above. Write the word from column II that fits each meaning in column I.

I	II
16. produced by fire or volcanic action	igneous
17. sparkle; twinkle	ignite
18. persistent compulsion to start destructive fires	cinders
19. burn; reduce to ashes	incinerate
20. causing or designed to cause fire	scintillate
21. substance that gives off a sweet odor when burned	pyre
22. set fire to	pyromania
23. pile of wood on which a dead body is burned	incendiary
24. ashes	incense

D. **Synonyms** are words that have the same or nearly the same meaning. **Antonyms** are words that have opposite or nearly opposite meanings.

Directions: In each line in column I, find the two words that are related either as synonyms or as antonyms. Then look at the remaining word. Find a word in column II that is related to it in the same way as the other two words are related to each other.

I	II
25. typical, unique, individual	superficial
26. complement, supplement, implement	assist
27. compel, dispel, force	retain
28. precise, vague, profound	embellished
29. affected, pretentious, flowery	transitory
30. parcel, allot, preserve	scatter
31. devise, contrive, comprise	withstand
32. resist, repel, repulse	include
33. essential, fundamental, temporary	group

Beyond Great Expectations

by Susan Witty

1 Conductor Zubin Mehta was rehearsing the Philadelphia Orchestra at the Mann Music Center in the summer of 1983 when a slip of a girl with large eyeglasses and a Buster Brown haircut stepped from the wings, walked to the edge of the stage, and peered into the nearly empty audience. Midori Goto, the eleven-year-old violinist slated to be that night's surprise soloist, was searching for her mentor, Dorothy De Lay, the woman who in more than three decades with the Juilliard School has nurtured many extraordinary young musicians to world renown. Having ascertained that De Lay's motherly figure was indeed in attendance, Midori disappeared backstage to fetch her violin. Moments later she bowed shyly to the orchestra, then stood somewhat awkwardly, in shiny patent leathers and polka-dot socks, staring down at the tip of her pendant bow as she waited for her cue in Paganini's First Violin concerto. When it came, she raised her violin and deftly touched bow to strings.

2 "I was so overcome by what she did in rehearsal," Irvin Rosen, principal violinist of the orchestra's second violin section, commented afterward. "If I practiced three thousand years, I couldn't play like that. None of us could."

3 Back at her hotel, the child Rosen had referred to as "the greatest talent I ever heard since Yehudi Menuhin" ordered a chocolate mousse from room service and behaved like any light-hearted youngster on a vacation.

4 That evening, while Midori communicated intricate musical complexities with consummate ease, Mehta and the orchestra gazed at her, their faces softened by admiration. At the conclusion of her performance, the audience rose to their feet as one. During the thunderous applause that followed, someone handed Midori a bouquet of roses, and struggling to hold both flowers and violin against her tiny body, she exited the stage. Four times the audience called her back with cheers of "bravo," yet the following day there was no mention of her triumph in the newspapers.

5 In another era, it might have seemed inappropriate for an astonishing youngster of more than simply adult abilities to go unremarked. In the 1980s, however, bringing a child genius before the public is considered a delicate matter, for present guardians of the gifted have grown wary of the public's appetite for sideshows. Even the word *prodigy* has fallen on hard times.

6 The hoopla that surrounded such child wonders as Jascha Heifetz at the turn of the century, the national fame that mantled the Quiz Kids in the 1940s, is studiously avoided. Didn't Quiz Kid Gerard Darrow, who appeared on the cover of *Life* at age nine, end up an alcoholic? Didn't William James Sidis, a celebrated mathematics prodigy who entered Harvard at age eleven, spend the bulk of his adult years doing nothing more challenging than collecting streetcar transfers from all over the world?

7 "These days there's a reluctance to label children as prodigies. There's a fear it will affect them in a negative way," says Tufts University developmental psychologist David Henry

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Feldman, a leading investigator in the field. But whatever adults choose to call them, children who at a very early age learn to master what most of us never will are just as much a part of the human condition today as when five-year-old Mozart composed minuets or three-year-old John Stuart Mill spoke Greek. In fact, more is probably known about these children than ever before.

8 "The inner world of a creative person is very complicated," testifies Lorin Hollander, world famous pianist, who was composing at three and touring the world as a concert pianist at fourteen. Hollander remembers that as a baby he would toddle to the piano and "choose which note I would become. I would reach for an E flat, and I would become E flat." What enabled Hollander, at age four, to comprehend within minutes the entire system of musical notation?

9 Recent research suggests that there is no single cause of prodigiousness, that neither high IQ nor accomplished ancestry can reliably predict it. In his book *Beyond Universals in Cognitive Development,* David Henry Feldman states that a prodigy emerges because of a "coincidence." In addition to being born with an unusual talent, an incipient prodigy, Feldman claims, must be born in the right place at the right time. If home isn't nurturing, if society doesn't value the gift, if appropriate education isn't available, potential won't be realized.

10 How do prodigies usually make themselves known? Einstein didn't talk until he was four. In K. K. Karanja's case, the opportunity to reveal his talent came by sheer accident. No one in his family had ever played chess when, shortly before his seventh birthday, he selected the game in a toy store. Several months later, having taught himself from a book by world-chess-champion Bobby Fischer, K. K. entered a primary-school championship and won first place among the unranked.

11 Displaying an unusually rapid mastery of this demanding game, over the next eighteen months K. K. became U.S. Primary School Champion; was awarded a scholarship by the American Chess Foundation; and staged an exhibition at Madison Square Garden in which, playing five games at a time, he took on fifty challengers—mostly adults—and, with the exception of one draw, defeated them all. K. K.'s aspirations include one day becoming the greatest chess player in the world.

12 Teachers of the talented agree that those among them who are best qualified for the position are neither threatened when outdistanced by their pupils nor burdened by the need to always be right. With luck, an exceptional student will come across an exceptional teacher. As things now stand, however, an estimated 80 percent of the intellectually gifted have no opportunity to receive special instruction in the areas in which they excel.

13 Special and unequal schooling for the gifted has never been a popular idea in the United States, except among a few educators who maintain that these children are the nation's future leaders—and among the gifted themselves. "The kids here want to be challenged by a teacher," comments Jim DuSel, resident director of one of the summer schools run by the Johns Hopkins University Center for the Advancement of Academically Talented Youth (CTY). "Often they don't get that challenge, not because of teachers but because classes aren't homogeneous and they are slowed down by other kids."

14 For the teenagers who on average complete the equivalent of two high-school courses in three to six weeks at a CTY school, the opportunity to learn quickly is an advantage, but even more valuable, as one of their teachers suggests, is the rare opportunity "to be with their own kind." Often outcast from others their own age by their prowess and all-consuming rigors of perfecting their skill, prodigies come to depend on adults even more than most children do, and perhaps that is why growing up, which is not easy for anyone, appears in many instances to be more difficult for them. Confronted with the turmoils of adolescence and exalted expectations for their adulthood, they frequently discover themselves at an impasse.

15 Susan Susedik's extraordinary scholarship started her on an accelerated odyssey: three days in kindergarten, one week in the first grade, two weeks in the second grade, two weeks in the third grade, high school at age five. Susan, who was a premed student at age thirteen, said her classmates at Muskingum College treated her "like they treat[ed] each other." Sometimes, however, she felt self-conscious about her age.

16 In their teens, prodigies almost uniformly experience a kind of mid-life crisis, and many a one has been unable to make the transition from performing in an intuitive way to becoming a

mature practitioner of his or her art. Some have not survived the perils of this metamorphosis with their early powers intact.

17 Child prodigies at the portal of adulthood must decide how, as adults, they will choose to utilize the talents and intelligence that as children they simply took for granted. But for the rest of us, the wondrous gifts that set them apart are never taken for granted. As Zubin Mehta reminded the audience when he introduced Midori that memorable evening at the Mann Music Center, "At a very young age, some . . . children know things we can only dream about knowing. Things we cannot teach."

HOW WELL DID YOU READ?

Did you gain insight into the characters?

1. Midori can best be described as

A sophisticated well beyond her years
B exceptionally talented but childlike in her interests
C similar in every way to children her age
D quite gifted but with no interests other than playing the violin

2. With which of these statements would David Henry Feldman probably agree?

A High IQ is probably the single most important predictor of prodigiousness.
B Whether or not a prodigy emerges depends on several important factors and their timing.
C Prodigies most often make their extraordinary gifts known before the age of three.
D The home plays almost no role in whether an incipient prodigy reaches his or her potential.

How well do you remember?

3. How did K. K. Karanja become interested in chess?

A Through his family's encouragement
B Upon receiving a chess set as a gift
C By accidentally choosing it
D After joining the school games club

4. According to the article, what percentage of the intellectually gifted have the opportunity for specialized instruction?

A 20
B 40
C 60
D 80

5. In the United States the idea of special instruction for the gifted is popular among

A college graduates
B most educators
C the gifted themselves
D both **B** and **C**

Can you draw the right conclusions?

6. "Contemporary guardians of the gifted" are very careful in handling prodigies in order to

A avoid the failures of earlier prodigies
B ensure the prodigies' financial futures
C secure the greatest possible news coverage
D keep their families out of the picture

7. The article describes good teachers of the gifted as

A bright and talented
B aggressive and brilliant
C prodigies themselves
D self-confident and secure

8. The article implies that the most important advantage of special education for gifted students would be to

A advance more rapidly through school
B be with persons similar to themselves
C have teachers as gifted as themselves
D avoid the usual problems of adolescence

9. According to the article, during the teenage midlife crisis, most prodigies must stop taking their gift for granted and begin

A using the gift in a mature, deliberate, and productive way
B getting an education in some area in which they can earn a living
C driving themselves to achieve what has never before been achieved
D trying to attain the fame necessary to be recognized as a prodigy

10. Which of these has the greatest chance of reaching his or her potential?

A A cellist who is gifted and whose parents like rock music better than classical music
B A writer whose mother is a respected English teacher and whose school spends most of its extracurricular funds on basketball
C A brilliant mathematician whose parents want their child to go to vocational school and become a carpenter
D A talented dancer whose parents pay for private lessons and who attends a high school for the performing arts

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. coach; tutor; trusted advisor *(1)*
2. perfect; complete *(4)*
3. watchful; always on the alert *(5)*
4. covered, as if with a cloak *(6)*
5. beginning; becoming apparent *(9)*
6. extraordinary ability *(14)*
7. elevated; high *(14)*
8. blind alley; place with no way out *(14)*
9. immediately understandable; instinctive *(16)*
10. undamaged; whole *(16)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. slip *(1)*
    - **A** young, slender person
    - **B** small piece of paper
    - **C** mistake in judgment

12. edge *(1)*
    - **A** cutting side of a blade
    - **B** favorable margin; advantage
    - **C** border; rim

13. matter *(5)*
    - **A** subject for consideration
    - **B** substance of which something is made
    - **C** something written or printed

14. cover *(6)*
    - **A** place of protection; shelter
    - **B** outside of a magazine binding
    - **C** substitute during an absence

15. courses *(14)*
    - **A** paths over which something moves
    - **B** series of classes; subjects
    - **C** parts of a meal

C. Many English words are based on the following **roots:**

liqu (fluid)
hydr (water)
und, ond (wave)
aqu (water)

Some words in which these roots appear are

liquid	ondometer
liquidation	aquarium
hydrophobia	aqueduct
dehydrated	aquatint
undulation	

Directions: Write the word from the list above that will complete each of these sentences.

16. I have heard that the local _____ contains a good collection of fishes.
17. In some countries, refusal to conform to party beliefs results in _____.
18. One of the symptoms of _____ is the patient's inability to drink water.
19. Water is steam in a _____ form.
20. In Rome you may see the ruins of an _____ built many centuries ago to bring water into the city.
21. A machine that measures waves is an _____.
22. This powder is _____ milk; if you add water to it, it will be drinkable.
23. The _____ of the snake is a graceful motion.
24. An _____ is an etching made to look like a watercolor.

D. Synonyms are words that have the same or nearly the same meaning. **Antonyms** are words that have opposite or nearly opposite meanings.

Directions: In each line in column I, find the two words that are related either as synonyms or as antonyms. Then look at the remaining word. Find a word in column II that is related to it in the same way that the other two words are related to each other.

I	II
25. treasure, pleasure, cherish	incompetence
26. single, individual, outstanding	likely
27. prophecy, retrospect, counsel	conspicuous
28. notable, negligible, improbable	absolute
29. endurance, helplessness, stamina	enjoyment
30. follow, goad, push	demarcation
31. barrier, boundary, obstacle	pursue
32. vital, unmitigated, crucial	observe
33. approve, sanction, witness	mislead

ARCHAEOLOGY PROBES THE ORIGIN OF A FALLEN CIVILIZATION

The Etruscan Enigma

by Raymond Bloch

1 In the heritage passed on to our world from older civilizations, we must not forget the legacy of the Etruscans. In the sixth and seventh centuries B.C., half a millennium before the rise of Rome, these industrious and enterprising people almost succeeded in bringing the entire Italian peninsula under their sway. Their fleets and armies were outfitted for wars of expansion and conquest by the most advanced metallurgical technology in the central Mediterranean; they carried on fruitful cultural and commercial relations with the city-states all around the Mediterranean from Carthage to Athens; their artistic tradition exerted an important influence on the art of Rome. Yet the most fundamental question about the Etruscans remains unanswered: Who were they?

2 This was a question the Romans could not answer when they turned to writing history after their own conquest of the Italian peninsula. Although the Etruscan language was written in the Greek phonetic alphabet, it bore no resemblance to any other language known to the Romans; even in the light of modern linguistic knowledge, it remains an anomaly. The surviving texts are meager, and the modern scholar can deduce the meaning of only a few of the words; but enough is known to state positively that Etruscan is not an offshoot of the Indo-European language, from which all the other significant languages in Western history were derived.

3 In attempting to solve this riddle the ancients propounded two theories about the origin of the Etruscans. One held that they had come from Asia Minor to the western shores of Italy in a maritime migration; the other argued that the Etruscans were natives of Tuscany, rooted there long before the Phoenicians and Greeks migrated by sea to colonize distant shores of the Mediterranean. Modern scholars find themselves divided along roughly the same lines.

4 The waning hope that this riddle can be solved rests with archaeological investigations now being conducted on an unprecedented scale in Tuscany and northern Italy. Out of a peculiarly intense preoccupation with mortality, the Etruscans left underground a rich record of their life on earth. Their burial mounds and spacious vaults are found in profusion over the wide areas they occupied in ancient Italy, forming true necropolises—cities of the dead. The Etruscans went into the hereafter with the familiar and cherished objects of their lives, or representations of these objects, surrounding them in their tombs. Compared with the infinite riches of the necropolises, the remains of Etruscan cities have yielded little to archaeological knowledge. Even in their most prosperous days the Etruscans built their houses of wood or with mud walls; this perishable material has of course vanished.

5 In the south of Etruria the Etruscans quarried their tombs from the living rock. The tomb proper is made up of one or more chambers that apparently reproduce with loving fidelity the long-since-vanished home of the departed. In northern Etruria, where the geology made this type of construction difficult, the tombs were built of blocks of sandstone or travertine and

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were often covered with earth or a cairn of rocks piled to a considerable height.

6 The art objects contained in the tombs have special interest for the archaeologist. It is clear that our knowledge of these people—who left no literary texts and whose language remains barely understood—must be based on detailed study of their art, which portrays many social and religious customs more closely related to those of Asia Minor than to those of the Romans and Greeks. A strong movement in contemporary Etruscology uses evidence of this kind, together with the linguistic isolation of the Etruscan language, to support the theory that the Etruscans were indigenous to Italy, that they belonged to a loosely interrelated family of peoples who inhabited the shores of the Mediterranean, including the shores of Asia Minor, before the Indo-European invasion upset the ethnic patterns of the region. That invasion came in the second millennium B.C. Some pockets of the indigenous peoples would have remained, and the Etruscans are said to constitute one such pocket.

7 The ancient tradition of the arrival of sailors from the East cannot, however, be completely discarded. The history of the Italian peninsula suggests that they could have arrived in the late eighth century B.C. This was an era in which bold seamen were crossing the Mediterranean in all directions. A few ships from Asia Minor, impelled by the same winds and the same desires that drove the Greeks and Phoenicians, may well have landed soldiers and craftsmen on the coast of Tuscany.

8 Compelling historical evidence for this view is the relative suddenness with which the Etruscan culture and civilization came into being. In contrast to the Romans, whose power grew slowly and through great effort, the Etruscans quickly attained a state of high prosperity in an Italy that was still half primitive; this ascent to high civilization was fully as rapid as the contemporaneous flowering of the neighboring Greek and Phoenician colonies.

9 With these neighbors the Etruscans soon found themselves engaged in a chronic contest for power that was to prove the principal theme of their political history until the decline of their fortunes in the fourth and third centuries B.C. Throughout the time of Etruscan greatness, in the sixth and fifth centuries B.C., the balance of power at sea was held by an alliance of the Etruscans and the Carthaginian colonies against the Greeks. After a great naval battle in 540 B.C., Etruscan colonies displaced those of the Greeks on the island of Corsica. In contrast to the Greeks, who did not seek to extend their sway into the hinterland of their ports, the Etruscans moved northward to conquer and settle the plain of the Po, and southward into Latium and Campania. Crossing the Po Valley on their way to trade bronze and jewelry with the Celtic peoples of the Alps, Etruscan merchants found a verdant countryside inhabited by scattered tribes. The merchants were followed by armies in the second half of the sixth century, and Felsina became the capital of a new Etruscan confederation that reached to the shores of the Adriatic.

10 Greater historical importance attaches perhaps to the Etruscan drive southward. This conquest brought the Etruscans to Rome, and it is through their influence on Rome that they left a lasting imprint on history. Tradition dates the Etruscan occupation of Rome from 616 B.C., when the first Etruscan king, Tarquin the Elder, is said to have come into power, until 510 B.C., when Lucius Junius Brutus is supposed to have led the revolt that expelled the last Tarquin. Actually the occupation lasted a third of a century longer. Archaeological findings show that during this period and for years afterward Rome had the appearance of an Etruscan city, with a powerful surrounding wall and many temples decorated by Etruscan artists.

11 Throughout their domain the Etruscans carried on a vigorous and well-managed exploitation of their resources. Their skill in metalworking equipped them with all kinds of tools, instruments, and utensils for the cultivation of their fields and for the easing and adornment of their domestic existence.

12 At the full tide of Etruscan power the federation reached as far south as Pompeii, Herculaneum, and Sorrento; but the Etruscans were compelled to travel overland to these cities after a defeat at sea by Greek ships from Cumae. The Battle of Cumae in 474 B.C. was the turning point in Etruscan history. For the next two centuries the rising power of Rome cut off the southern provinces from Tuscany, and the Celts pouring over the Alps from Bohemia and the valley of the Danube flooded the provinces of the north. By 350 B.C. the Etruscan occupation of the north was a memory. Meanwhile the Romans had begun their slow erosion of Tuscany itself; the last Etruscan stronghold fell in 265 B.C. and the long struggle was at an end.

13 The resolution of the enigma of Etruria

must await further archaeological investigation. It is apparent, from the samples investigated so far, that grave robbers over the centuries have missed few of the tombs; 98 per cent of the tombs explored between 1958 and 1960 had been robbed, and 60 per cent of these had been completely stripped. On the other hand, several thousand hitherto unknown tombs have been located. Among them are twenty frescoed tombs in Tarquinia, the first to be found since 1894. Such work will surely bring our picture of the Etruscans into clearer focus, and may yet tell us who they were.

HOW WELL DID YOU READ?

Did you see the reason?

1. **The Romans, when they turned to writing history, did not tell the story of the Etruscans' origin because the**
   - **A** Etruscans were a conquered people
   - **B** Romans did not know it
   - **C** Romans wished to conceal it
   - **D** Romans wrote only their own history

2. **Little archaeological work has been done at the sites of Etruscan cities because**
   - **A** there is little left of them
   - **B** they were stripped by the Romans
   - **C** they are difficult to find
   - **D** the Etruscans were not city dwellers

3. **The art of the Etruscans is of special interest to the archaeologist because it**
   - **A** is well preserved
   - **B** portrays the Etruscan way of life
   - **C** is highly developed
   - **D** is very scarce

Did you note the important facts?

4. **One of the ancient theories of the origin of the Etruscans was that they**
   - **A** came overland from Asia Minor
   - **B** were Indo-European invaders
   - **C** came to Tuscany by sea
   - **D** none of the above

5. **Archaeological investigation of Etruscan sites is**
   - **A** almost finished
   - **B** being conducted at a slow rate
   - **C** barely begun
   - **D** progressing rapidly

6. **Etruscan tombs are found**
   - **A** clustered together
   - **B** buried in the ruins of cities
   - **C** in only one area
   - **D** all of the above

7. **The Etruscan confederation attained its power with the aid of**
   - **A** Phoenician merchants
   - **B** Greek allies
   - **C** the Carthaginian colonies
   - **D** Corsican soldiers

8. **At the height of their power, the Etruscans held sway over**
   - **A** most of the Italian peninsula
   - **B** northern Italy south to Rome
   - **C** the area around Rome
   - **D** southern Italy north to Rome

What does the writer think?

9. **One fact supporting the theory that the Etruscans were not native to Italy is that**
   - **A** Greeks and Phoenicians had colonies nearby
   - **B** they were able to conquer their neighbors
   - **C** their art is different from Roman art
   - **D** the Etruscan civilization rose rapidly

10. **The decline of Etruscan power began with**
    - **A** a defeat at sea
    - **B** the Roman erosion of Tuscany
    - **C** the migrations of the Celts
    - **D** the overthrow of the Tarquins

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. thousand-year period *(1)*
2. departure from general rule *(2)*

3. put forward *(3)*
4. conical heap *(5)*
5. native *(6)*
6. of a nation or culture *(6)*
7. happening at the same time *(8)*
8. region inland from coast or river *(9)*
9. green *(9)*
10. riddle *(13)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. expansion *(1)*
    - **A** dilation
    - **B** territorial growth
    - **C** stretching

12. positively *(2)*
    - **A** constructively
    - **B** dogmatically
    - **C** definitely

13. mortality *(4)*
    - **A** nature of man
    - **B** death
    - **C** mankind

14. impelled *(7)*
    - **A** urged
    - **B** forced
    - **C** driven

15. exploitation *(11)*
    - **A** unethical utilization
    - **B** use
    - **C** promotion

C. *micro* (small)
macro (large)
magna, magni (great)

A knowledge of these **prefixes** will provide you with a key to the meaning of many unfamiliar words.

Directions: Use the prefix *micro-, macro-, magna-,* or *magni-* to complete each word so that it fits the definition. Write the word.

16. _____scopic (minute; not visible to the naked eye)
17. _____ficent (splendid; imposingly beautiful)
18. _____be (very tiny living thing; germ)
19. _____cosm (the wide world; the universe)
20. _____scopic (visible without the aid of a microscope)
21. _____nimous (having a great soul; generous)
22. _____meter (instrument for measuring minute distances)
23. _____tude (importance; influence; greatness of size)
24. _____physics (branch of physics dealing with masses that can be seen)

D. An **idiom** is a phrase or expression that has an accepted meaning different from its literal meaning. Idioms have various origins; many have entered current speech from the language peculiar to an occupation, profession, locality, or sport.

Directions: The idioms in column II are some that originated in nautical usage. Write the idiom that best fits each definition in column I.

I	II
25. withstand or endure successfully	at sea
26. uncertain; bewildered	get one's sea legs
27. reveal one's true self	steer clear of
28. begin vigorously	ride out
29. keep away from	sail against the wind
30. become entangled with	sail into
31. become accustomed to something	show one's colors
32. be forced to resign a position	walk the plank
33. work under difficulties	fall afoul of

10

AFTER MORE THAN A CENTURY OF STRUGGLE . . .

The Sax Comes of Age

by Gilbert Millstein

1 The saxophone was born sometime between 1840 and 1842—possibly in Brussels—and refined in Paris; it has been called various names, both good and bad, and so has its inventor, a brilliant, flamboyant, litigious man, rarely inhibited by seizures of modesty. He was born Antoine Sax in Dinant, Belgium, in 1814, but somehow came to be called Adolphe by the time he arrived in Paris in 1842. Sax and the saxophone blew up a storm that has yet to subside.

2 To begin with, the saxophone is an invention rather than an evolution. It combined the material used in the brass family, the mouthpiece of the clarinet, the keywork of the flute, and the conical tube of the oboe. Sax may have been looking for an instrument that would (*a*) imitate the human voice better than other instruments; (*b*) be sandwiched in between the strings and woodwinds and brasses; or (*c*) combine in a single instrument the flexibility of the strings, the color of the woodwinds, and the power of the brasses.

3 The saxophone came along at a time when, as Günther Schuller, a contemporary composer (longhair and shorthair) and classical French-horn player, observes, most people considered the symphony orchestra a "near-perfect instrument, a marvelous fusion of sounds that didn't need much improvement." French army bands, on the other hand, did; the steadily increasing use of brass instruments had thrown them and the woodwinds out of tonal whack. The army seized on the saxophone in 1845—a year before Sax was officially declared its inventor—to restore the balance, which it did.

4 Two of the saxophone's earliest champions were Berlioz (". . . most rare and precious qualities") and Rossini ("the most beautiful medley of sounds I know"), and it has had its scattered adherents, including, in no particular order, Bizet, D'Indy, Ibert, and Richard Strauss; Saint-Saëns, Delibes, Debussy, and Mahler; Vaughan Williams, Webern, Wolpers, Berg, Schönberg, Hindemith, and Prokofiev. Rachmaninoff, having written his "Seven Symphonic Dances" for voice, heard it played on a sax and was so enchanted that, at his command, the piece was performed solely on that instrument. As the situation stands today, the saxophone is easily the premier instrument in dance and jazz bands; a mighty component of military bands; barely tolerated in symphony orchestras, and relatively rarely written for by composers of "serious" music.

5 If there is a "curse" on the saxophone, it resides in the instrument's powerful, naturally tremulous tonal quality, known to musicians as its *vibrato,* which is much greater than that of the "legitimate" woodwinds and requires iron discipline to keep it from blanketing an orchestra or sounding like a lovesick goat let loose in a choir loft. Anyone in the mood for paradox may reflect on this one: While the sax is very likely the easiest instrument to pick up, it is very nearly the toughest to master, and most symphonic woodwind

Based on "The Sax Comes Up the Moskva River" by Gilbert Millstein.
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players can't be bothered to master it.

6 There was a saying among classical musicians that nobody wrote for the saxophone because nobody could play it, and nobody could play it because nobody wrote for it. When anybody did write for it, conductors fell into the habit of having the saxophone part adapted for other woodwinds.

7 Having repelled instrumentalists, composers, and conductors, the saxophone reached the point where its very appearance was tawdry; this occurred when manufacturers fancied it up with all kinds of frosting, gilding, and plating as it sank to the level of popular music. In its early days, its shape was considered peculiar, and its system of keys and levers appeared inordinately complicated, thus creating a natural demand for it in vaudeville, which thrived on seals rendering "My Country 'Tis of Thee" on batteries of horns. A humorist of the twenties defined a gentleman as "a person who can play a saxophone and doesn't"; and one clarinetist, on being shown his first saxophone, said, "Laddie, that's not an instrument—it's a glorified motor horn."

8 One of the first people to criticize the saxophone—one of the most powerful, at any rate—was Richard Wagner, who, in 1861, attributed the failure of his *Tannhäuser* in Paris to, among other things, Adolphe Sax, whom Wagner described as a "terrible man." Wagner complained that he was unable to find twelve French horns in all Paris; that Sax forced on him "all kinds of substitutes in the shape of saxophones and saxhorns."

9 Not until its 3543d concert, in November 1939, did the New York Philharmonic acknowledge the saxophone's existence as a solo instrument. Oddly enough, one of the founders of the Philharmonic in 1842, the year Sax was perfecting the instrument, was a man named Harvey B. Dodworth, whose family was well known in New York orchestra and dancing academy circles, and who is credited with putting the saxophone into American military bands around the mid-nineteenth century.

10 Chances are the instrument got its biggest initial push in the United States from the incredible Patrick Gilmore, a band leader who is better remembered for something else: it was he who staged eighteen days of concerts in Boston in 1872, with 2000 instrumentalists and 20,000 singers, and talked Johann Strauss into doing some of the conducting.

11 Paradoxically, jazz was the last musical field to accept the saxophone; although it had already been played in minstrel shows and dance orchestras (military bands frequently doubled for concerts and dances), it was unheard of in the first New Orleans jazz bands. What Dodworth and Gilmore were to the saxophone in band music, Art Hickman and Paul Whiteman were to it in jazz. Hickman put together the first complete saxophone-bearing jazz band ("Jazziest Tune Tootlers in the Valley of the Moon") in 1914 in San Francisco, and Whiteman and his symphonic jazz made the instrument mandatory in every jazz and dance band in the land.

12 An account of the rise of the saxophone would be incomplete without mention of a man named Rudy Wiedoeft, a solo "pops" and concert saxophonist, who swept the country in the 'teens and twenties. Wiedoeft so fascinated a young saxophone player named Hubert Prior Vallee that the latter changed his first name to Rudy; he became much better known, however, as the "Vagabond Lover" and crooned more than he played.

13 The consensus appears to be that, fundamentally, musicians themselves were responsible for the saxophone's slow progress; a well-known concert saxophonist remarked recently, "The approach was wrong from the beginning. Most performers didn't study correctly, and that's probably what steered composers and conductors away from it." Another said, "There's a kind of inertia and acceptance of a pattern set years ago—this whining, whimpering vibrato. For some strange reason, no conductor to my knowledge ever said, 'Now, look, man, don't play with that vibrato. Play it with a straight tone.' And the habit persists, and nobody does anything about it."

14 Contrarily, this uncontrolled vibrato was exactly what the doctor ordered for dance bands, which are supposed to sound loud enough to drown out the clash of cutlery, the clink of glasses, and the voices of noisy customers, while retaining a romantic quality.

15 Several names, besides the ones already mentioned, have emerged over the years and become identified with the supreme in saxophone accomplishment. Among them are Guy Lombardo ("The Sweetest Music This Side of Heaven"), Bud Freeman, Coleman Hawkins, Lester Young, and Charlie Parker. The free-ranging style and imaginative playing of noted jazz saxophonist Ornette Coleman pioneered in changing the performance of traditional black music. By abandoning

rhythmic structure and harmony and producing eerie sounds in his solo improvising, Coleman helped to revolutionize jazz. Musicians like Coleman and his contemporaries achieved respectability for the saxophone as a leading instrument in the jazz orchestra.

16 The trials and tribulations of the saxophone can be illustrated by a story, possibly apocryphal, told about its inventor. According to the story, Sax put together a saxophone for the Brussels Industrial Exhibition of 1841—but it was never shown, let alone played, because some jealous competitor or musical reactionary stamped the instrument into scrap metal. The saxophone has been misunderstood ever since, if only because nobody is sure exactly what it was that Sax had in mind when he created the instrument.

HOW WELL DID YOU READ?

Did you see the reason?

1. **The saxophone is an object of controversy because of**
   - **A** its unusual tonal qualities
   - **B** the character of its inventor
   - **C** the uses to which it has been put
   - **D** its indefinite origin

2. **Military bands have found the saxophone useful because it**
   - **A** is a novelty
   - **B** is easy to learn to play
   - **C** provides tonal balance
   - **D** has much tradition behind it

3. **The saxophone's natural vibrato is**
   - **A** impossible to restrain
   - **B** difficult to control
   - **C** easy to prevent
   - **D** necessary for balance

Did you understand what the writer said?

4. **The saxophone is "an invention rather than an evolution" because it**
   - **A** has never been improved
   - **B** was not a direct descendant of any traditional instrument
   - **C** filled no particular orchestral need
   - **D** is an intricate device

5. **The saxophone is "barely tolerated" by symphony orchestras because**
   - **A** it is relatively inflexible
   - **B** there are few orchestral parts written for it
   - **C** most other instruments are more versatile
   - **D** it tends to overpower other instruments

6. **The saxophone owes its adoption by vaudeville to its**
   - **A** novelty and ornate appearance
   - **B** tonal qualities
   - **C** both **A** and **B**
   - **D** neither **A** nor **B**

Can you read between the lines?

7. **The saxophone is easy to pick up but difficult to master; this implies it is**
   - **A** often played badly
   - **B** not worth the trouble of learning
   - **C** almost impossible to play well
   - **D** in need of simplification

8. **The fact that jazz was the last field to accept the saxophone is paradoxical because**
   - **A** jazz is its natural element
   - **B** it is now the premier instrument in jazz bands
   - **C** it was designed for just such use
   - **D** jazz was the first field to try it

9. **The writer believes that Wagner's criticism of Sax as the cause of the failure of *Tannhäuser* was**
   - **A** valid
   - **B** caused by jealousy
   - **C** not entirely justified
   - **D** incomprehensible

10. **The real blame for the saxophone's slow acceptance, in the eyes of the writer, was**
    - **A** Antoine Sax
    - **B** the saxophone itself
    - **C** the fact that it was misunderstood
    - **D** coincidence

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. showy; bombastic *(1)*
2. quarrelsome *(1)*
3. held in check *(1)*
4. special; specific *(4)*
5. quivering *(5)*
6. gaudy; cheap *(7)*
7. excessively *(7)*
8. obligatory *(11)*
9. general opinion *(13)*
10. of doubtful authenticity *(16)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits each word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. color *(2)*
    - **A** hue
    - **B** tone
    - **C** kind

12. champions *(4)*
    - **A** conquerors
    - **B** prize winners
    - **C** supporters

13. premier *(4)*
    - **A** earliest
    - **B** foremost
    - **C** highest

14. peculiar *(7)*
    - **A** distinctive
    - **B** strange
    - **C** particular

15. rendering *(7)*
    - **A** giving up
    - **B** restoring
    - **C** performing

C. The root *meter,* or *metr,* meaning "measure," was originally the Greek word *metron.* It was incorporated into Latin as *metrum,* then into French as *mètre,* and finally into English, first as *metre* and later in its present forms. Some of the English words using this root are

metric	kilometer
thermometer	metronome
speedometer	meter
astrometry	barometer
geometry	

Directions: Write the word from the list above that will complete each of the following sentences.

16. Heat is measured by means of a _____.
17. Many piano players use a _____ while practicing.
18. This morning a man from the electric company came to read our _____.
19. We will have stormy weather soon; the _____ is dropping rapidly.
20. _____ is the branch of mathematics that deals with the measurement of lines, planes, and solids.
21. The system of measurement used in Europe is the _____ system.
22. It is against the law to drive a car if its _____ is not working.
23. A _____ is a unit of measurement equal to about five-eighths of a mile.
24. _____ deals with the measurement of distances between stars.

D. **Synonyms** are words that have the same or nearly the same meaning; **antonyms** are words that have opposite or nearly opposite meanings.

Directions: Of the three words in each line, two are related, either as synonyms or as antonyms. The third word is unrelated. Decide which of the words are related, and what the relationship is. Write **S** or **A.**

25. instrument, device, limitation
26. succeed, imitate, originate
27. conceivably, probably, possibly
28. passed, relapsed, elapsed
29. turbulent, mysterious, untroubled
30. relatively, comparatively, figuratively
31. inordinately, reasonably, peculiarly
32. mandatory, obligatory, commanding
33. initial, intermediate, final

THE AMOEBA IS ONE EXAMPLE OF

MAGIC Under the Microscope

by Eugene Kinkead

1 If the history of the protozoa were to be represented by a four-story building forty feet high, then the history of humankind would be represented by the wing of a fly laid across the building's façade.

2 The story, as microbiologist Roman Vishniac tells it, started with the formation of the earth—a process that scientific opinion now estimates began three or four billion years ago—and followed this roughly approximate course: A whirling ball of gases torn from the sun gradually solidified in a pattern that placed the heaviest elements of our present chemical scale centrally and worked outward to the lightest, principally hydrogen and oxygen, the components of water; these intermingled and rose in blankets of clouds many miles high. As the still-molten globe whirled on its pathway through space, the moon was born from the bulk of the earth in a repetition of the process that ripped the earth from the sun. On the earth's surface the continental platforms floated into place; the global covering gradually hardened and cooled so that it could receive the vaporous layer's endless precipitation as water, instead of reconverting it instantly to steam and sending it aloft again. When this occurred, the heavy clouds, piled on each other mile after lofty mile, loosed their burdens like weary sponges; the skies were cleared by rain that lasted centuries, filling the ocean beds. "All this for protozoa," Vishniac says happily, "for life began in the sea."

3 Protozoa were not the first life; they were merely the first animal life. In the still mysterious beginnings of living things—things that are born, grow, reproduce, and die—science ordains a certain order of historical events: first came the formation of organic molecules from the inorganic substances, like nitrogen and calcium, which were brought, dissolved by the rains, into the ocean from the continents. Next came the development, from the combinations of these molecules, of certain higher forms of creation like the viruses, which sometimes seem living and sometimes do not. Then the first plants

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arose, and subsequently the protozoa, the first animals, emerged. Protozoa were too soft-bodied in the beginning to leave in the rocks any record that would enable us to date their arrival. But in 1954 an announcement was made in the press of the finding of the oldest plant fossils yet discovered, in a sediment that is 2.6 billion years old. By the current system of reckoning, this places the protozoa, which presumably developed not long after the plants, in existence well over two billion years. Humanity, the modern variety, is generally thought to be fifty thousand years old.

4 More than fifteen thousand species of protozoa are known; the *Amoeba proteus,* one of the commonest, is an excellent example of the obscure protozoan way of life. It resembles a small, mobile, translucent blob of jelly, and can survive in any kind of freshwater, be it Lake Superior or a mud puddle. The ordinary amoeba, less than a hundredth of an inch across, moves by thrusting out one lobe of its gelatinous body and pulling or pushing the rest of itself after it. In this fashion, it has been observed to travel the distance of the diameter of its own body in one minute. Under the microscope, which magnifies motion as well as size, this does not seem like a snail's pace—the rate would amount to about one foot in twenty-four hours were the amoeba to travel in a straight line—which, incidentally, it never does. It eats fellow protozoa and one-celled plants like diatoms, both of which it captures by encirclement.

5 One theory about the amoeba's amazing ectoplasm, which elongates and retracts when needed and through which pass food, water, and refuse without leaving a hole, is that it is made of ultramicroscopic bubbles, a form of construction that would permit these phenomena. Whatever its composition, it is amazingly strong and can, when necessary, by means of two protrusions, part a paramecium (considered by microscopists to be an extremely tough little organism) with remarkable ease.

6 While science credits the amoeba with being merely a mindless, undifferentiated drop of cellular matter, its actions might well be considered intelligent. For instance, it moves away from an area into which acid has been poured; it accepts an edible object but rejects an inedible one; if it puts forth three lobes, or pseudopodia, to find something solid that it can grasp, it withdraws the groping pair when the third has successfully discovered such an object.

7 According to Roman Vishniac, the simplest answer seems to be intelligence, in the loose, ordinary sense of the word. Otherwise, how does the amoeba know enough to absorb the two arms on the other side of the body when one has fulfilled its mission? In the case of an ape, Vishniac points out, this certainly would be called intelligence. One of the most amazing sights of the microscope is watching a relatively slow-moving creature such as the amoeba catch a quick-running animal such as a ciliate of the genus *Stylonychia.* You think to yourself: Surely the amoeba must have brains. You see how, as if by magic (or intelligence), it suddenly attaches itself to this rapid ciliate. There is a fight; the ciliate seeks to tear away, the amoeba to engulf.

8 Often the victim does escape at first. Getting some distance off, it feels secure, but the amoeba pursues, creeping, and if the amoeba starts in the wrong direction, by some miracle it gets its bearings, reverses its direction, finds its prey, and in the end is usually triumphant. The amoeba is a wonderful example of the living single cell, which nature contrived billions of years ago—perhaps nature's magnificent and final creation. "For," says Vishniac, "basically, nature seems never to have got beyond this original beautiful trick; all subsequent life is formed of it. The cortex of the cerebral hemispheres of the human brain is composed of twelve billion [living single cells], and the rest of the body of trillions more, packed into layer upon layer of tissue. Other single-cell accumulations make up the hummingbird, the fiddler crab, the walrus, and the mosquito; practically all these cells are the same size as the one that forms the amoeba.

9 "Thus, here is another connection within the compass of all life. As I look at nerve cells under the microscope, working their way through and around muscle cells as they take their normal growth through tissue, I see that their movement is strikingly like an amoeba's. And as I watch the white corpuscles of blood cleaning up a hemorrhage, I see that they eat the damaged red blood cells exactly like an amoeba engulfing its prey. Never once do they approach healthy red blood cells, but with amoeboid intelligence they concentrate only on their natural prey, exactly like the amoeba at the bottom of its mud puddle."

10 Near the center of the amoeba is an almost invisible structure called the nucleus, whose functions include control of reproduction and the assimilation of food. If an amoeba is cut in two with one part containing the complete nucleus and the other part none of it, nothing

much happens at first; both sections quickly replace the outside cover and go about their business, but the nonnucleated fragment, while it can capture food, cannot digest it, and it finally dies after ten or twelve days, the period it would take an ordinary amoeba to starve if all nourishment were withheld from it. An amoeba protects the nucleus, which apparently is its vital spark, by *encysting* when its habitat dries up. By this process it produces out of its own substance a warty shell within whose confines it can lie dormant for a long time.

11 Vishniac recalls that one of these encysted amoebas was caught in the folds of the wrapper of a mummy that was brought to the British Museum. During a careful examination of the wrapper, part of which took place under the microscope, the amoeba was seen and recognized by the viewer, who put it in a little water, anxious to see what would happen. Still watching through the microscope, he saw the rough casing burst and the amoeba move off, for all the world as though it had not been dozing quietly for the last four thousand years.

HOW WELL DID YOU READ?

Did you see the writer's purpose?

1. **The origin of the earth is treated in this selection because it**
   - **A** is the author's own theory
   - **B** explains the origin of the protozoa
   - **C** gives the reader information that is needed to read the rest of the selection with comprehension
   - **D** serves as a dramatic introduction

What did you learn about the subject?

2. **The amoeba uses its ability to project pseudopodia to**
   - **A** propel itself
   - **B** engulf its prey
   - **C** camouflage itself
   - **D** all of the above

3. **A nonnucleated amoeba is unable to**
   - **A** avoid negative stimuli
   - **B** digest food
   - **C** capture food
   - **D** live for a short length of time

Did you note the important details?

Decide whether these statements are true, false, or not included in the selection. Write **T, F, or NI.**

4. Protozoa were the first form of life on earth.
5. The soft-bodiedness of the protozoa has made any dating of its beginning impossible.
6. The composition of the amoeba's ectoplasm has never been definitely determined.
7. The human brain contains cells that might be likened to the amoeba.

Can you evaluate the evidence?

8. **The writer relates Roman Vishniac's theory of the origin of life in a way that implies that he**
   - **A** reluctantly accepts it
   - **B** disagrees with it
   - **C** is impartial because of his lack of firsthand knowledge
   - **D** is not vitally interested in it

9. **What the writer calls "amoeboid intelligence" is intelligence in the sense that it is**
   - **A** ability to learn through experience
   - **B** mental acuteness
   - **C** ability to deal with various situations
   - **D** creative to some degree

10. **The prevailing tone of the selection can most accurately be described as one of**
    - **A** admiration
    - **B** scientific detachment
    - **C** absorption
    - **D** condescension

LEARN ABOUT WORDS

A. Often you can tell the meaning of a word from its context—the words around it.

Directions: Find the word in the paragraph that means

1. front side *(1)*
2. establishes; decrees *(3)*
3. letting light through *(4)*
4. outer layer of a cell *(5)*
5. stretches *(5)*
6. projecting parts *(5)*
7. not distinguished *(6)*
8. false feet *(6)*
9. absorption *(10)*
10. lumpy *(10)*

B. A word may have more than one meaning. Its meaning depends on the way it is used.

Directions: Decide which meaning fits the word as it is used in the paragraph. Write the letter that stands before the meaning you choose.

11. platforms *(2)*

A stages
B raised surfaces
C statements of principle

12. mobile *(4)*

A fluid
B showing changes
C moving

13. bearings *(8)*

A applications
B manners
C sense of position

14. compass *(9)*

A circumference
B scope
C circuit

15. vital *(10)*

A essential to life
B of greatest importance
C full of vigor

C. Some **roots** which appear in many English words are

pneum, pne (breath; wind)
ether (air)
aer (air)

Pneum, pne comes from the Greek *pnein,* meaning "to breathe." *Ether* comes from the Latin *aethir,* meaning "upper air." *Aer* comes from a similar word, *aer,* which existed in both Latin and Greek.

Directions: The words in column II are based on these roots. Write the word from column II that fits each meaning in column I.

I	II
16. by means of air pressure	pneumatics
17. unsubstantial; airy	pneumonia
18. disease of the lungs	pneumatically
19. science or art of making and flying aircraft	aerophobia
	aeronautics
20. anesthetic gas	ethereal
21. expose to air; cause air to enter	ether
	aerate
22. fear of air, especially drafts	aerospace
23. of earth's atmosphere and the space about it	
24. branch of physics dealing with air and gases	

D. Synonyms are words that have the same or nearly the same meaning. **Antonyms** are words that have opposite or nearly opposite meanings.

Directions: In each line below are five words. From them, select the two pairs that are either synonyms or antonyms. If both pairs are synonyms, write **S;** if both pairs are antonyms, write **A.** If there is one pair of synonyms and one pair of antonyms, write **M,** mixed.

25. approximate, elucidate, estimate, delineate, enumerate

26. components, exponents, constituents, transients, proponents

27. substantial, imaginary, short-lived, ephemeral, wavering

28. presumably, naturally, probably, subsequently, consequently

29. relatively, absolutely, partially, superficially, basically

30. prey, quarry, quay, canyon, dock

31. occasionally, fundamentally, customarily, accidentally, intentionally

32. concentrate, contemplate, consolidate, permeate, penetrate

33. dormant, savage, dramatic, inactive, ferocious

If you enjoyed reading the Purple Power Builders, you might also enjoy the following novella:

25. *The Crazy Hunter*

GUIDE TO THE LITERATURE STRAND

SRA

READING LABORATORY®

3b

revised edition 1988

by Don H. Parker

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THE LITERATURE STRAND

OVERVIEW

The new component of the *Reading Laboratory IIIb,* the Literature Strand, has been included to promote the reading of classic literature, an appreciation of fine writing, and a realization of the important role reading plays in a person's life. Another important goal of the program is to inspire students to write creatively.

The Literature Strand is comprised of twenty-four stories ranging in length from eight to fifty-six pages and a novella of eighty pages. Each is a separate booklet containing attractive illustrations and an accompanying lesson that includes comprehension/discussion questions, writing assignments, and suggestions for related activities. The questions are primarily inferential and are designed to further the student's understanding of the story and of its meaning for him or her. The ideas for the writing assignments spring from the story itself: students are asked to write a story-length piece that will in some way relate to the story—in theme, in plot, in character, in setting, and so on. The activities suggest, among other things, research exercises and additional reading of works by the same author or on the same topic.

USES OF THE STRAND

The Literature Strand may be used as an adjunct to the *Reading Laboratory IIIb,* a supplementary program—or as either a basic world-literature textbook or a supplement to the literature text in use. Very few, if any, of the stories in the Literature Strand appear in junior or senior high-school anthologies. The teacher can feel confident that students will find the stories new and exciting.

USING THE STRAND TO TEACH LITERATURE

If the teacher is using the Strand as a component of *Reading Laboratory IIIb,* he or she may utilize it in two ways: student conducted or teacher

conducted. With the first, the student chooses a selection, reads it, and answers the questions; the student then evaluates his or her responses, using the answer key in this guide. If desired, the teacher can evaluate the answers.

In the teacher-conducted situation, students read the selection, either in class or as homework. Then they write the answers to the questions and class discussion follows. An alternative would be to omit written answers to the questions and focus entirely on classs discussion.

USING THE STRAND TO TEACH CREATIVE WRITING

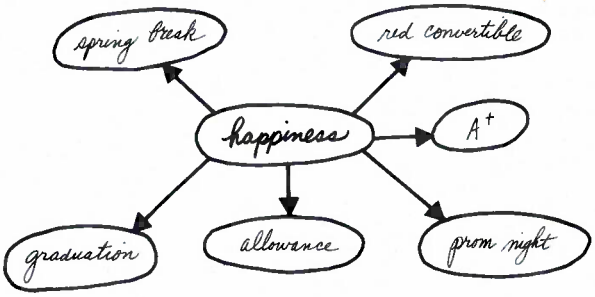
Getting students to read the stories in the Literature Strand is easy—the stories are great! Getting them to write may be just as easy.

Many students have an intense distaste for writing—especially creative writing. They see an assignment and respond with a blank stare or write something dull and uninspired. To avoid both of these responses, the teacher might employ a simple and practical method of teaching writing which has been refined and presented by Dr. Gabriele Lusser Rico. In her book, *Writing the Natural Way,* Dr. Rico delineates this method.

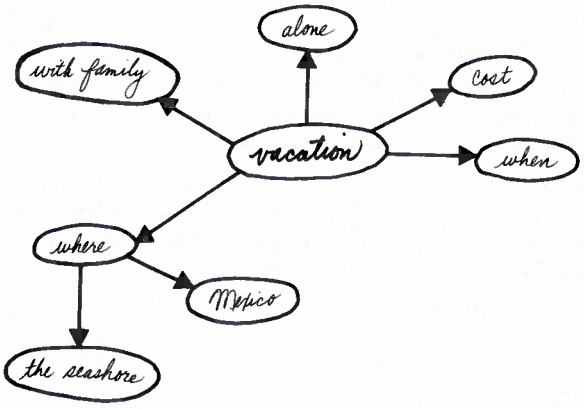
Research has shown that in the creative process the two hemispheres of the brain work differently to achieve a creative end. The left hemisphere is occupied with the logical, the critical, the literal, and so on, while the right hemisphere is occupied with original ideas, the unconscious, insights, discoveries, and so on.

Dr. Rico's "natural way" involves teaching students to first use the right hemisphere to conjure up and develop an idea and then to use the left hemisphere to *finish* it, just as a fine-furniture maker will first design a chair or a table and then carve it and sand it and polish it until it shines.

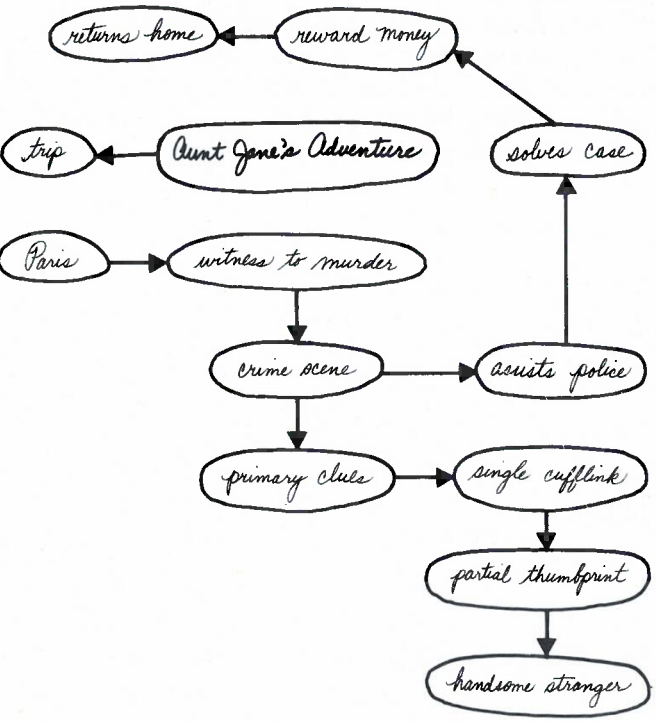
Rico's basic method is simple: She calls it *clustering;* others may call it *webbing* or *mapping* or another name. The method asks the writer to focus on a single, relatively simple word, phrase, or impression and then to literally expand from it. In its simplest form it looks like this.



In a somewhat more complex form it may look like this.



The ideas of a cluster derive from what we may know as "stream of consciousness" or "free association": one idea leads to another, that to another, that to three more, and so on, as can be seen in the example at the top of page 9.



Dr. Rico explains that almost inevitably clustering leads to a "trial-web shift." A trial web is a writer's first consciousness of what he or she wants to say. It is almost a feeling, a general impression of the whole. It is from this that the writer realizes his or her destination. The shift is the change from vagueness, from generalness, to a sense of direction. The writer suddenly knows what he or she wants to say, and, now utilizing the left hemisphere, goes to work.

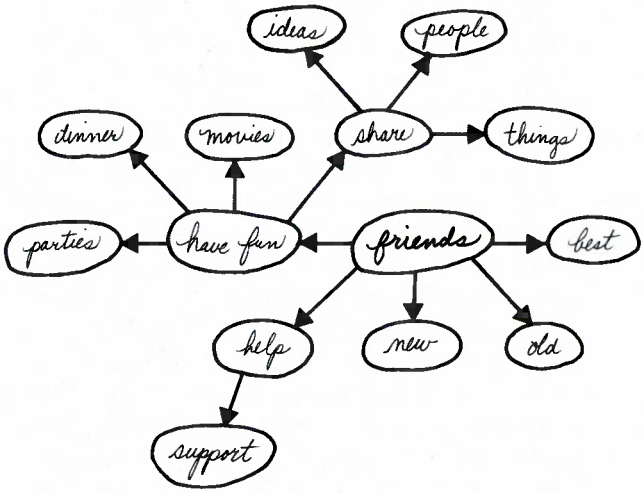
It is suggested that the teacher encourage students to use clustering to get started on their writing assignments, and the best way to teach them the method is to take the whole group or class through an exercise or two. The first exercise will take about twenty-five minutes, the second about twenty. Students will first cluster and then write what Dr. Rico calls a *vignette*.

Exercise 1

Each student should have a pencil or pen and a sheet or two of paper. The teacher should follow the procedure outlined below.

1. Explain to students the meaning of *clustering* and *trial-web shift*. Draw an example on the board or show students the illustrations in this guide. Students might do a cluster as a group.
2. Have students write *friends* on their paper a few inches from the top and circle it. (Students will write their vignette on the bottom half of the sheet.) Tell them to write down the words and phrases that pop into their heads. Suggest that students not judge or even ponder these but just jot them down, circle them, and connect them with a line to the word that inspired them. Arrows should be used to show direction. Explain that the exercise is for the student only; no one else need see it. Students who "block" can doodle a bit (redraw arrows, recircle, etc.) until another idea emerges. Students should cluster for up to two minutes.
3. Soon students will experience a "trial-web shift"; they will feel a need to write. They will know what they want to say. At this point they should begin writing and do so for about eight minutes, filling no more than half a page. In writing students must make choices, for they will now have more ideas than space. They should use those ideas that relate best to the cluster and to one another.
4. Students should close their vignettes (and later their stories) with some kind of reference to its beginning—the sentence(s) that inspired the vignette (story). This may be repetition of a word, phrase, idea, feeling, and so on. In doing this the writer comes full circle and the result is a coherent whole.
5. Have students take five minutes to read over their work and make changes that will improve it. They should be striving for coherence, sense.
6. The teacher should discuss each vignette with the writer, suggesting ways he or she might improve.

Below is the cluster and vignette of someone using Dr. Rico's method for the first time.



Friends are of many kinds, and each fills a special need. Sometimes we need to think of the past and we need old friends for this—friends with whom we share memories. Sometimes we need company—someone with whom to share a movie, a meal, good conversation. Sometimes we need help—someone who will share a burden with us, help us to bear the load, to understand, to go on. To find all these friends in one friend may be a miracle. If you find her, keep her.

Exercise 2

The teacher should follow the steps for Exercise 1, using one of these words or a word of his or her choice: *teenager, magnetism, endures, tide, 3022, brothers.* Be sure to choose a word that can elicit interesting clusters, and, thereby, inspired, creative writing.

THE LESSONS

The Face on the Laundry Room Floor

by B. J. Chute

Questions

1. The lives of the grandmother from North Dakota and her son and daughter-in-law now in New York must have been quite different. Imagine the lifestyles of these people and compare them. How might the differences have influenced their relationship with one another?
   Answers will vary but should include characteristics of small-town living versus big-city living, houses versus apartment buildings, automobiles versus public transportation, entertainment, education, etc.
2. State and explain the metaphor used in the third paragraph of the story.
   The author compares the grandmother with a tomb filled with dark, negative feelings about her daughter-in-law. The woman seems lifeless, without zest; she concentrates only on the negative.
3. The grandmother's character is partly revealed in the descriptions of her feelings toward the three women in the laundry room and toward her daughter-in-law and of the changes in these feelings. Describe the grandmother's feelings towards these characters and how they change. Use examples from the story to support your contentions.
   Idea: The grandmother didn't like Trudy's not wanting to do things the grandmother's way, accused her of laziness and filth, of not caring properly for her grandson. She thought the women in the laundry room were stupid, cheap, phony. After the cockroach incident, the grandmother concluded the women were kind, compassionate, sympathetic. She transferred these feelings to Trudy, deciding Trudy must be similar to them and that "cockroaches were city facts of life."
4. Why does the grandmother suddenly become so benevolent toward cockroaches? Does she come to understand these insects—or herself? How does the cockroach in the laundry room change her life; affect her attitudes toward others, toward herself?

Idea: The grandmother sees herself as a cockroach, and in screaming out to save the insect, she is screaming to save herself. She doesn't want to be annihilated. The grandmother gains some understanding of herself, albeit unconscious, and learns that certain behavior begets certain behavior, kindness begets kindness. She has a sudden change of heart regarding Trudy and her son and starts planning a positive interchange with them.

5. Will the grandmother's experience be likely to change some of her attitudes permanently? What might happen when she returns to the apartment?
   Idea: Feelings of conquest and triumph are not deep enough to affect permanent changes. The grandmother might revert to her old attitudes.

Activity

The main character in this story, until the climax, feels that she has been wronged. She then undergoes a change in attitude. Such a story, with its thematic implications, can be profitably compared to "Why I Live at the P.O." by Eudora Welty. Think about how the two stories are similar; how they are different.

Writing Assignments

1. Often a particular, seemingly mundane, experience will change the course of a person's life. (In contemplating a cockroach, for example, one wouldn't look to it for such a change, but . . .) The meeting experience might involve an introduction to a special person, a visit to an unusual place, a dream. Write a story about how such an experience changed a person's life. Be sure to deal with the characters and the event in detail.
2. In this story feelings of being rejected bring the grandmother momentarily to the edge of madness. This state is quickly resolved in her by kind treatment and a return to a sense of her own worth. Select a subject to write about that involves extreme rejection. As an alternative to a short story, a narrative in free verse would lend itself well to the subject.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

Harrison Bergeron

by Kurt Vonnegut, Jr.

Questions

1. The handicapping devices described in "Harrison Bergeron" are meant to promote equality. Ironically, they have the effect of emphasizing superior talents and qualities. How do they do this?
   Idea: The more superior the individual, the more devices, and the more cumbersome the devices he or she will be wearing.
2. *Science fiction* involves technological or scientific advances depicted in a future time. *Fantasy* depicts events or conditions that are fanciful or wild—and not likely to occur. Which label, in your opinion, better describes "Harrison Bergeron," and why?
   Answers will vary. Students who choose science fiction should emphasize the physical devices prescribed to attain perfect equality among the citizenry. For example, the use of mental handicap radios; weighted sashes and neck gear; thick, wavy glasses lenses, etc. Students who choose fantasy should emphasize the unlikeliness of events and circumstances in the story. For example, ballerinas who dance with weighted bags around their necks, television announcers who have speech impediments, a Handicapper General who shoots-to-kill any defiant citizen, etc.
3. In avoiding the "evils" of competition by handicapping its talented and superior citi-

zens, this future society suffers what unpleasant side effects?
Ideas: Mediocrity in all human endeavors; loss of personal freedom; the blunting of emotional response; lack of initiative; the establishment of a cruel, authoritarian bureaucracy.

4. What might Harrison Bergeron's motivation be in coming to the television studio?
Ideas: He may hope, by example, to encourage viewers to rebel against the effort to enforce perfect equality; he may no longer wish to live in this "perfect" society, but want to experience life without his handicaps for a time before his inevitable death; he may have no motivation—the burden of his many handicaps may have simply driven him insane.

Writing Assignments

1. "Harrison Bergeron" is a startling, grotesque, and amusing story, yet its plot is based on the commonplace: a man and woman are at home watching television. Using the same basic idea of two people engaged in a mundane activity, write a fantasy or science fiction story.
2. Vonnegut's story carries the desire for equality to an absurd extreme. Using one of the following ideas, or one of your own choosing, write a story about an idea carried to its extreme.
   - Citizens should be penalized for failing to exercise their right to vote.
   - People should not be permitted to smoke.
   - People should have to prove their fitness for marriage and parenthood before they are allowed to marry or to have children.
   - In the absence of effective law enforcement, people should be allowed to defend themselves and their property in any way they see fit.
3. This story describes the perversion of one ideal which is dear to the heart of a democratic society; the ideal of equality. Another democratic ideal, which is somewhat opposite to equality, is the ideal of individuality or independence. What would happen if *this* ideal was perverted or carried to an extreme? Can you imagine a world where each of us was allowed to fulfill our individuality, to seek our own means fully to self-realization? How would a society function if each was allowed to go his or her individual way? Write a story or describe a situation where this happens.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

A Wagner Matinee

by Willa Cather

Questions

1. Compare the narrator's aunt's life in the East with her life on the Nebraska frontier.
Ideas: In Boston—concerts, much less physical work, trips out of the city, more contact with people, family not too far away; In Nebraska—heavy physical work, little music, primitive living conditions, no extended family nearby, near poverty.
2. What did the narrator gain from the years he spent with his aunt?
Ideas: Instruction in Latin, organ music; introduction to Shakespeare, mythology; exposure to opera; experience with music and literature in the midst of a very primitive life.
3. Reread page 5, paragraph 3. With what two things does the author compare Aunt Georgiana? How is his aunt like these things?
With a granite statue of Ramses and old miners who have been in the Yukon too long. Ideas: Like time and the elements wearing away the statue, time and a difficult life have taken their toll on Aunt Georgiana. Like the miners, she couldn't pull herself out of the old life; she, and they, couldn't fully comprehend the new situation.
4. On page 6 the author states, " . . . those long bow strokes seemed to draw the heart out of me, as a conjuror's stick reels out yards of

ribbon from a hat." What kind of figure of speech is the author using here? Explain what she is saying.

Metaphor. Idea: The music worked a kind of magic on the narrator, pulling out of him a depth and range of feeling he didn't know he was capable of.

5. On page 7, paragraph 2, the author again compares Aunt Georgiana to something. What? What is the author saying about the human condition?

   Moss. Idea: No matter how many the hardships, nor how austere the life, the appreciation of beauty is enduring. (There may be something to the idea that our appreciation of beauty is in direct proportion to the amount of hardship and deprivation we have experienced.)

Activity

The author paints a wonderful word picture of Aunt Georgiana. Draw a picture of this woman based on the author's description of her.

Writing Assignments

1. Even today many people, for one reason or another, go to live someplace vastly different from the place they call home. Write a story about someone who makes this kind of move. Be sure to explore the psychological, as well as the physical, changes caused by the move. You may write about one of the following topics or think of your own idea. You may research unfamiliar places in the library.
   - A 13-year-old girl whose father is a petroleum engineer moves to Saudi Arabia, from New Orleans, Louisiana.
   - A Jewish family from Chicago, Illinois, goes to live on a kibbutz in Israel.
   - A boy from New York City spends a summer on a farm in Kansas.
   - A California family moves to Hartford, Connecticut, when the mother's company transfers her there.
2. In part, the story is about remembering things past. Think of a pleasant relationship you had with an older relative or friend when you were a child. Imagine that ten years have passed and write a story about what might happen between the two of you when you meet again after this time. Be sure to describe the past as well as the present.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

Adventures of a Haversack

by Heinrich Böll

Questions

1. "Adventures of a Haversack" is told from the point of view of an omniscient narrator. What is an omniscient narrator? What are the advantages of telling a story in this way? Cite examples of the author entering the story by describing thoughts and/or feelings and commenting on something or someone.

   An omniscient narrator knows everything about the story, the settings, the events, the characters. The author can tell as little or as much as is needed for what he or she considers a successful story. Using an omniscient narrator allows for complete knowledge and thus a wider scope, and allows for flexibility. (Accept as examples all information in which the author comments directly upon the situation through his own voice, or enters a character's mind to record thoughts and feelings. For example, "unwitting Stobski" and "sleepy little Polish-speaking place."
2. Following the "travels" of the haversack enabled Böll to cover a good deal of territory. Write a summary of the story, including descriptions

of the settings (both time and place) and of the characters whose lives were touched by the haversack and forever changed by the conflicts.

Joseph Stobski of Niestronno assigned to barracks at Bromberg (1914); haversack found in English trench in Flanders (1914); English soldier Grayhead puts haversack into his own pack (1914); Grayhead, now in England, sold it to Soho junk dealer with whom it stayed (1916-1926); dealer sold it to Handsuppers Ltd.; Handsuppers sold it to South American state where it was taken up by German Reinhold von Adams; then it was taken by German Wilhelm Habke who took it to Spandau; Habke gave it to his son Walter (1936-1945) who marched with it as far as Niestronno where he died and Frau Stobski found it (1945). Frau Stobski never learned it had once belonged to her son.

3. What function does the haversack serve in the story—from the point of view of plot. What is the haversack's purpose with regard to theme?

   Plot: The haversack is the thread that runs through and ties together a great deal of history, involving diverse characters and bringing unity to the story. Theme: The haversack symbolizes war, and, sadly, how little value is placed on the lives lost or ruined—less value than is placed on the haversack itself. Böll's story points up the senselessness and futility of war.

4. Name a few instances of the author's use of irony. What is the purpose of this literary device?

   Grayhead's losing his leg means he can no longer be a tram driver; Banollo's relief when the shoes disappear; Walter Habke, Sr.'s exaggeration of his war record; Walter, Jr., starts to think—which is injurious to heroism; Stobski is declared a hero, even though he was killed after deserting the action; the haversack ends up where it began and no one is conscious of the fact. The use of irony can supply a light touch to a story or point up a twist of fate.

5. What traits seem to be common to most of the characters in this story? What do these traits illustrate?

   Sloth, greed, lying, ineptness, and drunkenness; these illustrate human weaknesses in facing danger and temptation.

Activities

1. In the world of art is war as a subject usually treated cynically, as something destructive of human values? Or is it sometimes treated as a medium for heroics, in which an individual achieves his or her true worth? Consider the motion pictures you have seen treating the subject. What varying attitudes toward war are reflected? Be prepared to discuss or write about your findings.
2. Interview a war veteran—if possible, one who has been in combat. Write up the interview, emphasizing the memories and impressions the veteran has kept. Has military service changed this person's life greatly or little? Make your report colorful.
3. Other authors who wrote about post-World War II Germany include Günter Grass and Uwe Johnson. Visit a library and read about the lives of Böll, Grass, and Johnson and write about the similarities and differences in their experiences before and during World War II. Compare what the biographers say about their work.

Writing Assignments

1. Write a story told from the point of view of the omniscient narrator. Remember, this narrator knows everything about the plot, the characters, the events, and so on; this narrator's knowledge is complete. You may write about one of the following topics or use one of your own.
   - A high school student is accused of stealing money from the school office.
   - Two young people get lost while on a camping trip.
   - A high school student gets elected president of the student body—through a series of dirty tricks.

2. Did you have a favorite toy when you were a child? What happened to it? Write a story about what happened to this toy after you outgrew it. Like Böll's story, make the toy a vehicle that ties together events and characters, as well as putting forward your message to the reader.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

5 Echo from Ithaca

by G. B. Stern

Questions

1. Ithaca was the birthplace of the Greek hero Ulysses. Why is the story titled "Echo from Ithaca"?
   The author compares Clementina to Ulysses in the story.
2. Why might Arthur and Clementina have married?
   Idea: Arthur was attracted to Clementina's upper-class background, and Clementina found in Arthur the kind of submissive personality with which her life as an explorer would be compatible.
3. Arthur Reginald Knox has a certain opinion of himself which proves at the end of the story to be inappropriate. How does Arthur's behavior at the story's conclusion compare with his statements throughout the story? Is his behavior consistent with his monologue?
   Idea: Throughout the story, Arthur Reginald Knox talks about the things he doesn't like about his wife and about how much he'd like their present type of relationship to change. He would like her to fit his stereotype of the proper wife and be under his dominance. He continually talks about his plans to make this happen. Ultimately, his behavior is not consistent with his monologue: he acquiesces to Clementina's forceful personality, tells her he will tidy her den, and accepts the status quo. He is either happy with the situation (underneath all his complaints), or he's simply too weak to tackle change.
4. Arthur's unavailing attack on the objects in Clementina's den is symbolic of what characteristic of their marriage?
   Clementina's imperviousness to his opinions or his actions. Just as his attempt at destruction had no effect, he has no effect on her.
5. What three events spur Arthur to his moment of rebellion?
   He and Clementina quarrel for the first time; he remembers the famous incident between Prince Albert and Queen Victoria; he feels he is given a signal of approval from the statue of Prince Albert.
6. Choose a simile from the story and explain its meaning.
   "His heart felt like a clenched fist."
   Shows how upset Arthur is, implies tension, tightness.
   ". . . soul was like the wild sunset sinking to the west . . ."
   Infers that he's losing control, that he's hot with anger.
   ". . . nerves like the finest steel springs . . ."
   Implies that Clementina has great strength, that she can bounce back from whatever difficulties she faces.

Activities

1. Choose a present-day, husband-wife relationship, one you've learned about from the media (for example, Prince Charles and Princess Diana, Robert and Elizabeth Dole, Paul Newman and Joanne Woodward), and compare it with Arthur's and Clementina's relationship. Tell how they are alike and how they are different. You might research your article in recent publications.
2. Mary Leakey was an archaeologist married to an archaeologist. Visit a library and research Mary Leakey or another female scientist. Try to find information about how her work affected the other aspects of her life. Write either a research report or a fictionalized account of an event in the woman's life.

Writing Assignments

1. Assume that at the end of the story, Arthur did what he intended to do. Write a new ending for the story. Be sure to include Arthur's thoughts as well as actions, and Clementina's response.
2. "Echo from Ithaca" is told from Arthur Knox's point of view. Retell the story from Clementina's point of view. You might consider her feelings about her work, her home, her husband, as well as her behavior at the story's conclusion.
3. Often in relationships there are clashes of will that test the endurance of the relationship and the devotion to each other of the parties. Write a story about two people who have a clash of wills, and about what happens as a result.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

The Dead Man

by Horacio Quiroga

Questions

1. In studies of people facing impending death, psychologists have observed that one stage of a patient's reaction is denial, refusal to believe that he or she is going to die. Does the man in the story experience denial? Justify your answer.
   Yes. Idea: His thoughts constantly stray toward future plans, like replacing the handle of his machete and replacing the fence posts around his plantation. He also imagines that he is merely resting, as he so often does after hard work.
2. The dying man is never given a name. Why might this be?
   Ideas: The author doesn't feel it's important to name his character, since the man is the only character in the story. Or, perhaps, it's done for effect, so that the man can symbolize anyone who suddenly faces death.
3. The man's dying thoughts are a good indicator of what is most important to him in his life. What is important?
   Idea: His plantation and the progress he has made working the land and planning the layout of his estate, as well as the work that still needs doing.
4. Read the following passage from the story and tell what common quality of all humans it illustrates. "But the man opens his eyes and looks. How much time has gone by? What world cataclysm has he survived. What upheaval in nature is reflected in this horrible event?"
   Idea: The universal tendency to think of oneself as the center of existence.

Activity

As this story suggests, for the individual, death is the culminating event, but as for the world at large, life goes on. This theme is extremely common in literature. For example, you might profitably compare the theme of this story to a poem by W. H. Auden, "Mundus et Infans." Another comparison of similar theme might be made to a short story by Katherine Mansfield, "The Fly." In making your comparisons, point out the various similarities and differences.

Writing Assignment

1. In the last paragraph of the story, the dead man's son calls to him. "Daddy!" the boy shouts happily. Continue the story. Describe the boy's reaction when he discovers his father's motionless body. Follow the boy's thoughts, actions, and feelings up until he says his bedtime prayers.
2. Has a friend or loved one ever passed out of your life through death or misfortune? How did you feel? Write a story or an autobio-

graphical piece about how someone's death or disappearance affected your life.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

The Great Wide World over There

by Ray Bradbury

Questions

1. What is the setting of this story? What is the probable time period?
   A farm cabin in a valley near some Missouri mountains. There is a creek nearby and a neighbor's place down the road. The time period is probably in the first quarter of the twentieth century before automobiles were commonplace.
2. Contrast the personalities of Cora and Tom Gibbs. What seems to be the status of their marriage, considering the period?
   Cora is romantic, imaginative, curious, loving, and vivacious; Tom is quiet, conservative, sober, demanding, dependable. Their marital roles seem typical of the period and the rural setting.
3. Cora's inability to read and write prevented her from communicating with people outside her immediate community. Describe how this lack of communication influenced her life.
   Because Cora couldn't read or write and because she had no phone, radio, etc., she had no knowledge of "modern inventions," of politics, of the state of her country and the world. She probably didn't know how other people lived, how their lives were different from hers, and she probably didn't know how to implement change in her life.
4. What is the relationship between Cora and Mrs. Brabbam at the beginning of the story? at the end of the story? What accounts for any changes of heart? Are they consistent with the character development?
   At first, Cora and Mrs. Brabbam seem competitive, wary of one another, distant. Later Cora, in her delight at not being alone and remote from people, feels guilty about her attitudes and does a kind thing for Mrs. Brabbam. Cora's change of heart is, indeed, in keeping with the plot and character development.
5. Cora is overjoyed to see Benjy. What does his arrival represent to her?
   Contact with a loved person from the great outside world and the fulfillment of an ambition.
6. Tom displays his feelings openly. What are his feelings regarding Benjy's arrival on the scene? regarding Cora's learning to read and write? Back up your answers with references.
   Tom doesn't like Benjy's intrusion into their lives and feels like he's being neglected. (p. 6, pars. 9, 10; 13–15; p. 7, par. 3; p. 8, pars. 6–9; p. 10, par. 17)
   Tom probably doesn't want Cora to become literate because it would change their relationship and he's content with the status quo. (p. 6, pars. 16–19; p. 8, pars. 14–17; p. 9, par. 3)
7. The mood of "The Great Wide World over There" changed dramatically from beginning to end. Tell how the mood changed and show how the author accomplished the change. What does the mood change tell us of Cora's life beyond the story?
   Accept answers that center on a beginning of optimism and hope (including cheerful descriptions of scenery and activity), and an ending of that optimism having passed (including examples of Cora's dissatisfaction and the dilapidated mailbox). The mood change suggests that the outlook for Cora is a bleak one.
8. "And at last came the day when the wind blew the mailbox over." What is the author telling us with this statement?
   That Cora will never learn to read and write, and her life will never change to any significant degree.
9. Cora made a tragic error during the summer Benjy spent with her. What was it? If she hadn't

made this error, how would her life have been different?

Cora should have had Benjy teach her to read and write rather than write the letters himself, but she was more concerned with immediate satisfaction than the long term. Had she learned to read and write, she could have been in touch with the world for the rest of her life.

Activity

Compare the theme of "The Great Wide World over There" to the theme of "Who Knows?" by Guy de Maupassant. How are the themes similar? How do both stories deal with the state of isolation?

Writing Assignments

1. Think of an example of something you intended to do to change your life, then neglected or refused to do. Write a story about just such an experience. Will your main character be able to resolve the conflict or not?
2. The story is told mainly from the point of view of Cora Gibbs; the other characters, however, are also quite interesting. Retell the story of Benjy's month with the Gibbses, with Benjy, Tom Gibbs, or even Mrs. Brabbam as the central character. Relate the new main character's feelings about reading and writing, and indicate what being in that particular setting meant to him or her.
3. In rural areas and simpler times the inability to read and write may cause one set of "problems," as in "The Great Wide World over There," but in a fast-paced, complex urban setting, the problems would be quite different. Invent a "city character" who, for one reason or another, cannot read and write. Develop a story around her or him.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

The Old Demon

by Pearl S. Buck

Questions

1. Write a character sketch of Mrs. Wang. Be sure to support your conclusions with examples from the story.

   Ideas: highly respected (p. 4, par. 4; p. 7, par. 4); simple (p. 4, pars. 3,6; p. 7, par. 5; p. 8, par. 8; p. 9, par. 3); folk-wise (p. 5, pars. 2–5; p. 13, par. 7; p. 15, par. 3); well-liked (p. 5, par. 7; p. 8, pars. 3, 4); brave (pp. 8–11; pp. 13, 15); kind (pp. 8–12)
2. The Chinese traditionally have a great respect for the old. Give some examples from the story that offer support for this generalization, and tell why you think it is so.

   Everyone listens to what Mrs. Wang has to say; the villagers sit around her at the dike; Mrs. Wang's grandson and his wife wait on her reverently; when she leaves to go home in the evening, most of the villagers follow; the soldiers spare their enemy's life on her order. Students may offer many reasons for the Chinese respect for the elderly, but the one most clearly defined in the story is their comparative wisdom and wealth of experience.
3. Mrs. Wang's feelings toward the Japanese soldier stand in stark contrast to her feelings toward the enemy army. What are these feelings, and what universal truth does this situation demonstrate?

   Mrs. Wang sees the soldier as a handsome, clever young man in need of her help, a man not too different from the men of her village. The enemy is a faceless danger, whom she destroys with glee. The universal truth is that it is easier to hate a faceless enemy than one with whom you have contact, because, in the latter instance, you see that you and your enemy are not very different.
4. In the story, the old demon was the river (which represents the forces of nature). There was a new demon, too. What was it? To what extent

do these two demons affect the lives of people today?

The new technology of war (which represents the forces of man).

Idea: To answer this question, one probably would have to take a rather cynical stance. Man has learned greatly how to harness the forces of nature and put them to work. He has made immense progress in discovering how the forces of nature work. This progress in one area, however, has not been matched by progress in harnessing the other "demon": man himself. To control the forces of nature is one thing; to control the forces within man is another. The big danger or threat today doesn't come from natural forces. It comes from man hurting or harming others and himself.

5. Why did Mrs. Wang stay behind in the village to watch the bombing after all the other villagers had fled?

   She was curious; she was not afraid of dying.

6. The crisis in a story is an important part of plot. It marks the turning point in the story, the point which leads to the resolution of the conflict and the way the story ends. What is the crisis in this story?

   The point of crisis is definitely when Mrs. Wang learns of the death of her brother and his family at the hands of the Japanese. Before this point, Mrs. Wang has tended to view the Japanese as not much different from herself, as something of not major importance. She has not clearly accepted the fact that they are the enemy and have to be destroyed. After the crisis, she is ready to make the supreme act and sacrifice. She releases the river and drowns those who have destroyed her brother and would destroy the rest of her family.

7. What irony is there in the way the story ends?

   Instead of drowning the village, the river is used to save Chinese lives. The old demon is used to destroy the new one.

Activity

Pearl S. Buck wrote many stories about the Chinese. Another of her stories which shows a sympathetic attitude toward these people is "The Frill." Find a copy of the story and compare it to "The Old Demon."

Writing Assignments

1. Old Mrs. Wang turned out to be a courageous woman—unafraid to die for her beliefs. Every day there are articles in newspapers and magazines, on television and radio, about other "ordinary" persons who have displayed great courage and made a difference in the lives of others. Write a fictionalized account of an ordinary person who decides to "make a difference."
2. Imagine that Mrs. Wang goes to purgatory following her drowning in the flood, and that she meets her husband there. How does he react? What does she tell him about her life? Is her sacrifice of sufficient value to save them both? Write a story that follows Mrs. Wang into the Buddhist purgatory.
3. Mrs. Wang's attitude toward life was different from that of the other villagers and her family. This difference in attitude was, in part, due to differences in age and experience. Write a story in which each character experiences the same situation differently. Tell the story from the various points of view.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

Who Knows?

by Guy de Maupassant

Questions

1. This story might be viewed as a portrait of isolation. What role does the furniture play in the narrator's isolated state?

Idea: At the beginning of the story, the narrator willfully embraces a semi-isolated state. He is part of society, and yet is removed. He depends mostly for his existence on material things: his home and his cherished furnishings. With the mysterious departure of the furniture, he is forced from his home out into the world. He travels and partakes more of direct experience, of life amongst people. But with the attempt to reclaim his furniture, again a bizarre and unexplained event, he is forced into a more severe isolation: the asylum. The movement in the story is from one form of isolation to a deeper one, and the furniture is the catalyst for the movement.

2. There are several examples of foreshadowing in the story. What are they?
   "I am today in a private asylum;" (p. 3, par. 3)
   "I attached myself strongly to inanimate things that assume for me the importance of living creatures" (p. 4, par. 4)
   "there came to me a certain uneasiness at the idea of entering it" (p. 5, par. 2)
   "It sometimes seems to me that I hear trains passing, that I hear clocks striking, that I hear the footsteps of a crowd." (p. 5, par. 6)
3. Sometimes the narrator of the story seems mad, sometimes not. Cite evidence for each point of view.
   Mad: the narrator's presence in an asylum; his admission of his somewhat unusual personality; his hearing things; his love for things rather than people; his seeing and hearing his furnishings moving by themselves; his servants not hearing or seeing anything unusual; his concern that the same thing would happen again; his concern that someone would get to him in the asylum
   Not mad: He must have behaved normally for the hotelkeeper, his servants, and the police in his hometown and Rouen all to react reasonably to him and believe him; the servant's corroboration that the furnishings were gone and his letter stating that they had been returned; possibly the narrator's voluntary entrance to the asylum
4. The author uses metaphors and similes throughout the story. Identify three of these comparisons and tell why the author uses each one.
   To create an atmosphere of foreboding:
   "The heavy weight of the trees wore the aspect of a tomb where my house was buried" (p. 5, par. 2); "arched and vaulted overhead like a high tunnel" (p. 5, par. 3); "a dull pain warns that the flame of his malady is not quite extinguished" (p. 9, par. 12)
   To present a picture: "couches dragging themselves along like crocodiles on their short legs"; "chairs leaping like goats"; "stools trotting along like hares"; "piano galloping like a runaway horse"; "smallest objects gliding . . . like ants"; "hangings slithered . . . like octopuses" (p. 8, par. 1)
   To help the reader hear: "crash rang out like a pistol shot" (p. 6, par. 6); "iron crutches that rang out like cymbals" (p. 6, par. 9)
   To create suspense: "a brave man, as a knight of the Dark Ages thrust his way into a nest of sorcery" (p. 10, par. 7); "tortuous as a maze" (p. 10, par. 8)

Writing Assignments

1. The story might be said to represent a person's worst nightmare coming true, that something a person greatly cherishes is taken away. Do you have such a fear? Write a story in which the main character loses a treasured item or loses an important opportunity. How will your character be affected by the event?
2. This story could be read as an example of hallucination. The bizarre experience with the furniture, which is never explained, could be said to have taken place in the narrator's mind. It contrasts sharply with the humdrum reality of his existence.

   Write a story similar to this in which a person experiences the fantastic. Make your setting and details realistic so that they contrast sharply to the hallucination when it occurs.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

10 The Blind Man

by D. H. Lawrence

Questions

1. The author frequently describes experiences in terms of senses other than sight. Give examples of his use of the other senses. Why does the author focus on these other senses?
   hearing—noise of weather; footsteps; other sounds
   smell—scent of Isabel's surroundings; odors of dairy, farm; barn; violets
   touch—Isabel's and Maurice's touching one another; Bertie's feelings about physical contact
   To show the importance other senses assume when one loses sight; to show the way Maurice experiences things.
2. Compare and contrast Maurice Pervin and Bertie Reid, both physically and emotionally.
   Maurice—blind; scarred; big, with heavy limbs; powerful, muscular legs; small head; brown hair; reddish hands; prone to depression; slow in mind; had feelings of desolation; passionate; sensitive; loving; farmer
   Bertie—dark grey eyes; small and dark with large forehead; moustache; odd, short legs; sad expression; bachelor; felt unable to marry; unable to enter into close contact with anyone; constant; kind, brilliant; wealthy; socially successful; barrister
3. Explain how the presence of Bertie Reid enables the author to delve even deeper into the personalities of Isabel and Maurice Pervin.
   Bertie's inability to be close to someone, his reluctance to be physically touched, can be contrasted with both Isabel's and Maurice's desire for closeness. That Bertie and Isabel had long been friends enables the author to shed light on Isabel's personality before her marriage to Maurice. The vast difference between Bertie and Maurice enables the author to present Maurice more vividly.
4. Reread pages 4 and 5. Explain the author's purpose in these pages and whether you think he achieved it and why.
   The author may have wanted to show, through Isabel's brief experience, what it is like to suddenly be unable to see. Isabel became acutely aware of things she could not see; she felt fearful, desperate, anxious.
5. How do Bertie and Maurice each feel at the end of the story? Why do their feelings differ so? What fact made their "friendship" possible?
   Bertie, before the final scene, probably felt concern for Maurice but no great affection or dislike for him. At the end, Bertie was miserable, unhappy at having had to touch and be touched by Maurice, both physically and emotionally, because he had an aversion to intimacy. Maurice, in contrast, was ecstatic at having, as he viewed it, become friends with Bertie. He had no such aversion to physical and emotional intimacy, and acquiring a friend was an important accomplishment to him. Maurice's blindness (his ignorance of Bertie's repulsion) made their friendship a possibility.
6. Explain the metaphor with which the story ends.
   Most molluscs are soft-bodied animals enclosed in a hard shell. Bertie had put up a protective shell around himself and it had been broken by Maurice. Like a mollusc, Bertie's very life, or his happiness at the least, might have been endangered by the broken shell.
7. Lawrence has been known throughout his work for upholding the values of the simple life of the senses, the physical life of being, as opposed to the life of the mind. In his opinion, modern society has been harmed through the pursuits of the intellect. Salvation for humanity lies in the return to the primitive sources of being (senses, emotions, physical drives). Comment on how Lawrence's opinion is revealed in the story.
   Idea: Because of his loss of sight, Maurice has been forced to return to simple basic truths of existence. His contact with the world is physical, based on simple sensual experience and emotional truth. He is the positive pole in the story. Isabel, through intimate contact with her husband, has gained insight, regardless of her periods of worry and anxiety. She also depends on basic instinctual truth for fulfill-

ment. Witness the importance of the coming baby. Bertie, on the other hand, represents what Lawrence finds wrong with modern society. He lives the life of the mind, isolated from the physical life and close contact. As a result, he is depicted as a neuter, a sterile figure.

Writing Assignments

1. Many persons' lives have changed because of a dramatic physical change. Write a story about someone who has experienced such a change. You may expand on one of the ideas below or think of one of your own.
   - An aspiring actress becomes a paraplegic as a result of a traffic accident
   - A young man loses a leg to cancer
   - A newspaper reporter has a cerebral hemorrhage at age thirty-five
2. Sometimes a happy and stable marriage is rocked and forever changed by an unexpected event. Write a story about such a marriage. Will the marriage emerge stronger from the incident, or will it dissolve under fire?

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

Lost at C

by Jean Shepherd

Questions

1. What device does this story depend on for its humor? Give some examples.
   Exaggeration. The vast distance of the student from the front of the room, his complete lack of knowledge of school subjects, the methods used by his back-seat pals to avoid being called on. Students may offer many other examples.
2. This story is particularly rich in figurative language. Choose seven similes from the story and give the meaning of each.
   Answers will vary
3. What function does the first paragraph serve in this story? Why didn't the author just begin the story with the second paragraph?
   The function of the first paragraph is to "hook" the reader into reading the story and to add to the tension and suspense of the narrator's situation.
4. Why do you think this story is told in first person?
   Answers will vary, but students should see that the story is more appealing, genuine, and perhaps even funnier when told from the narrator's point of view.
5. Ideals don't always match realities. One of the most common ideals or myths of our society concerns the Great Success Story. Here, regardless of birth or circumstance, if a person works hard, he or she stands every chance of achieving success. Reward comes only to those who have earned it. Comment on how this story treats the Great Success Myth.
   Idea: The story is one extended lampoon of this myth. Individuals are handicapped from the start because of something so ridiculous as the spelling of their last name. They may overcome the handicap, but not through honest effort. They overcome it through sham and trickery. In this respect, as in others, the author is consistently critical of the values of our society. Witness several of the narrator's remarks. The following is such an example.

   > *I was the victim of another American myth, namely that things can actually change for the better, that if you try hard enough you can transform the lead of your crummy self into some golden ideal. Countless billions are spent yearly in our blessed country on diets guaranteed to peel suet off in seconds, books that promise incredible sexual bliss, and other promising stupendous riches and happiness to those who can master the Seven Golden Rules contained therein. Alas.*

Writing Assignment

". . . my life unreeled before my eyes in the classic manner of the final moments of mortal existence." Use this quote from the story as the first sentence of a story of your own. It can be tragic, terrifying, or comical.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

Hook

by Walter Van Tilburg Clark

Questions

1. What is the setting of this story? How does the setting function in the story?
   Ideas: Among the California Oaks, beside a river, not far from the ocean, near a farm. The seasons and the food supply directly control Hook's life.
2. Name the "three hungers which are fused into the single, flaming will of a hawk."
   To fly, to kill and eat, to procreate (pp. 3–5)
3. Figures of speech are prevalent throughout "Hook." Give an example of metonymy, simile, metaphor.
   Some examples:
   "The boots passed on." metonymy (p. 7, col. 2, par. 3)
   "the shot sail continued to drag" metaphor (p. 9, col. 1, par. 2)
   "lived . . . like a ground owl" simile (p. 11, col. 1, par. 1)
4. What changes occur in Hook's manner as the story develops?
   The young hawk changes from helplessness to self-reliance and becomes a bold killer. At the end of his life, Hook is earthbound but dangerous, lacking vigor, broken-spirited, unchallenging.
5. There are instances in the story of the foreshadowing of Hook's ultimate fate. Cite some of these.
   p. 6, col. 2, par. 1; p. 7, col. 2, pars. 2, 3
6. Would a different ending to the story be consistent with its development?
   No, in spite of heroic measures to survive, Hook loses the struggle against overwhelming odds.
7. Describe the reactions of the farmer, his wife, and his son to the dog's killing of Hook. Tell also how each might have *felt* about what happened.
   Ideas: All three were fascinated by the spectacle although the man seemed more anxious to watch, even encouraging the dog to kill. The woman seemed to want the dog put out of its misery. The boy, too, encouraged the dog but stopped, probably because of the cruelty of the encounter. All three would probably be sorry that the farmer had not killed the hawk quickly with his gun.
8. The story is about a hawk named Hook but about larger issues as well. Name these.
   Ideas: the development of an animal's instincts, the beauty and cruelty of nature, the triumph of the strong over the weak

Activity

There is a school of writers called Primitivists. According to their ideas, regardless of the advances of civilization and its civilized ways, life is driven by certain basic hungers, emotions, and instincts. This instinctual life may at times lie beneath the surface, but it still exists, ready to erupt. It is the driving force.

Jack London was a member of this school of writers. Read one of his works, such as *Call of the Wild*, which is also mainly about an animal. How does it illustrate the ideas cited above? How does it compare to the story you have just read? In making your comparison, consider not only the hawk, but also the behavior of the people at the end of the story.

Writing Assignment

Choose an animal that interests you and research it; learn about its appearance, habitat, and behavior. Then write a story told from the animal's point of view. You may use either the first person or the third.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

The Snow Goose

by Paul Gallico

Questions

1. The author presents the setting of the story in the first five paragraphs. Describe the setting.
   A lonely, wild place, where the sea is constantly encroaching on the land.
2. Why do you think Rhayader especially chooses to paint birds?
   Answers may vary. Some students may feel that Rhayader, with his reduced mobility, admires the freedom of the birds he paints; others, that their beauty, in contrast to his ugliness, particularly attracts him.
3. The author says of his story that "It is not a story that falls easily and smoothly into sequence. It has been garnered from many sources and from many people." He tells this story in segments, so that it is not as cohesive as it might have been if he had presented it as a continuous narrative. What does he gain by this technique?
   The story has more of a sense of authenticity to it, as if it might really have happened.
4. The unlikely friendship between Fritha and Rhayader benefits each in what ways?
   Fritha learns a great deal about seabirds and painting from Rhayader; her knowledge of the world is greater than it would have been had they never met. Rhayader is not so lonely as he might have been without her company. Both of them experience love for the first time in their lives.
5. When the snow goose comes back to stay, Rhayader says, "This is her home now, of her own free will." What meaning, beyond the obvious one, lies in his words?
   He's suggesting, in a subtle way, that perhaps Fritha will stay with him.
6. Why do you think the author ends the story with the passage in which the lighthouse is destroyed and the sea rushes in to obliterate all traces of it?
   Answers will vary. Students may feel that the ending is a tribute to Rhayader: without him, there is no longer a reason for the lighthouse to exist. Others may feel the ending serves to emphasize the mindless destruction and futility of war.

Writing Assignment

This story dramatizes a basic contradiction between external and internal, between appearance and the inner self. Philip Rhayader's body is deformed and hideous, but his character is that of a courageous and benevolent man; and he possesses a keen intelligence. Growth in the story is revealed dramatically through the change in Fritha's feelings for Philip: from childish repulsion she moves, as a young woman, to feel love. She learns to value the man, not his appearance.

Using a similar contradiction as a basis, write a story based upon your own experience or imagination. The story should dramatize the value of an individual whose outward self is flawed.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

14 Silent Snow, Secret Snow

by Conrad Aiken

Questions

1. Stream-of-consciousness is a technique in which a character's thoughts, emotions, and memories are presented in a lengthy, flowing form, without using dialogue or objective description. What purpose is served by the stream-of-consciousness passages in this story?
   They draw the reader into the boy's fantasy world, making his secret, internal life seem vivid and real.
2. What is happening to Paul Hasleman in this story? Why?
   Student responses will vary, but should include that the boy is withdrawing from the world in which he lives—perhaps even going insane. As to why this is happening, there are few clues in the story. Paul's problem could be caused by something in the environment or could be caused by a biochemical malfunction.
3. What does the snow symbolize for Paul? The snow is also used as a literary device, symbolizing something to the reader. What would that be?
   Paul: peace, protection, distance from his parents and his everyday life
   Reader: a barometer of Paul's advancing illness
4. How are changes in Paul's mental state symbolized in the story?
   By the gradual infusion of snow imagery into Paul's everyday life. As Paul retreats more and more into a fantasy world, the snow imagery multiplies and becomes more intense. Witness especially the sound of the postman's footsteps: heard first above the seventh house, then the sixth, and so on, until finally they're not heard at all.
5. Schizophrenia is a mental disease, probably caused by a chemical defect in the brain, with the following symptoms: withdrawal from reality, thinking in illogical patterns, development of delusions, hearing voices, displaying inappropriate emotions such as laughing at things that are not funny. Based on this description, could Paul be suffering from schizophrenia? Defend your answer.
   Yes, Paul displays all of these symptoms in the course of the story.
6. The title of the story no longer applies toward the end of the story. Why?
   Paul has told the doctor about the snow and the snow has begun to roar.
7. Why does Paul strive so hard to keep his fantasy about the snow a secret?
   Part of the joy he feels about the imaginary snowfall is that it is a secret, and that having such a secret gives him a sense of power and security.

Writing Assignment

Stream-of-consciousness is a technique useful in illuminating the inner life of a character. Write a story whose plot depends on the use of stream-of-consciousness.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

15 Publicity

by Margery Allingham

Questions

1. Benedick is the name of a character in the Shakespearean play *Much Ado about Nothing*. In the play, Benedick is an apparently confirmed bachelor who marries. What significance does this character have to Tadema as the story begins?
   He sees himself as Benedick, a character playing a role, instead of a man choosing a woman with whom to spend his life.

2. The story revolves around the idea of pretense—people pretending to be what they are not for self-serving purposes. Who is the one completely honest character in the story? What important role does he play?
Gyp Rains. He sets the plot in motion by coming to tell Tadema in advance of his plans to marry Chloe.
3. Coincidence plays a crucial part at a couple of points in the story. What are they?
Duds Wallace, whose build is similar to Tadema's, steals his clothing and then is killed in a way that makes a positive identification impossible. Tadema flees to a town where he happens to know an actress who is almost as publicity-hungry as he is—and is willing to fall in with his plans and marry him.
4. What emotions pass through Tadema's mind when he discovers that Chloe is on the verge of marrying someone else? What emotion is notably missing?
Admiration for Chloe, humiliation, fear that his reputation will be ruined. A sense of loss or grief is missing.
5. What three purposes does Tadema hope his disappearance will serve?
It will give him a chance to think about what to do next, it will take some of the gloss from the publicity Chloe hopes to acquire by her sudden marriage, and it will give him plenty of publicity.
6. What action is responsible to Tadema's final triumph? What is the motive for the action, and how is this motive in keeping with the meaning of the story?
Chrissie Dilling betrays Tadema's confidence and informs others that he is alive and acting with her in the play. This forces Tadema to his final impulsive but brilliant stroke: he announces his marriage to Chrissie. Things turn out well for both of them; the sudden exposure is turned into positive benefit. As for the motive, Chrissie Dilling, as Tadema ironically declares, was acting to satisfy her need for publicity.
7. In what sense is "Publicity" a mystery or suspense story?
Ideas: It's a "missing person" story turned inside out, in which the reader follows the activities of the missing person. The mystery and suspense lies in how Tadema will turn a potentially damaging situation to his benefit.

Writing Assignment

Write a story in which the central character plans, and carries out, his or her own disappearance. Be sure to include the character's motivation, the result of the disappearance, and what effect it has on the character's life.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

The Blue Lenses

by Daphne du Maurier

Question

The question of what caused Marda's change in perception is debatable. It might have been the lenses; or it might have been pressure on an optic nerve; or it might have been the result of encroaching insanity. What matters, though, is whether her perceptions were accurate. Was Marda gifted with a special, true insight? Or had she fallen victim to mental illness? Give your answer and support your opinion.
No one answer is possible. Certain of the conclusions that Marda comes to in the progress of the story can be dismissed. Her situation is no practical joke or conspiracy on the part of the public at large or the hospital staff. Those are not masks she sees, but reflections of a personality. In this respect, the author gives plentiful suggestions that the personality matches the animal head: one nurse is like a cow; another is like a cat; the surgeon is like a terrier, and so on. If one accepts this idea, however, then it must also be concluded that the husband and Nurse Ansel are in conspiracy against the

wife. The animals, including the final vision which Marda has of herself as the sacrificial doe, are suited to the plot. The snake and the vulture will eventually do away with the deer to get her money. Some evidence supports this hypothesis.

Yet, an equally likely interpretation could be that what Marda sees is a reflection of her own state of mind, that she is undergoing mental collapse and suffers from a feeling of intense persecution. In such a state, she would certainly distrust both husband and nurse, as well as view herself as a sacrificial animal. The author leaves it to the reader to decide. True or not?

Writing Assignment

Create a story in which the main character has the qualities of a particular animal. Describe the character through actions and dialogue without naming the animal to whom he or she is being compared. Have several other students read your story and see if they can guess the animal you choose.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

Bartleby the Scrivener

by Herman Melville

Questions

1. What is the point of view of the story?
   The story is a first person narration by a Master in Chancery in the legal system of the State of New York.
2. Characterize the narrator of the story.
   One cannot identify the speaker with the author, Melville. Even though the narrator exhibits certain worthy traits and attitudes (witness his sympathy for Bartleby), he is also limited in his perceptions. By supporting Bartleby fully, he could have achieved a broader dimension of character. He fails to do so because he is too much of a conformist, a part of his Wall Street environment.
3. What seems to be the author's purpose in writing the story?
   The author expresses his views on the plight and passive resistance of an individual in an indifferent society. Bartleby's favorite words—"I would prefer not to"—are an expression of personal dignity. The words express a need to be understood, but Bartleby fails to communicate. As symbol of this failure, witness the many references to "walls" within the story. There is a barrier between Bartleby and others, in particular the narrator, which he can't bridge. All fail him in the end, and Bartleby dies an ignominious death before still another wall. Bartleby is a misfit principally because he adheres to his own individuality within a conformist society.
4. How is suspense built in the story?
   Suspense is built by withholding the identity of Bartleby and what motivates his behavior.
5. What is it that on the surface Bartleby objects to? What is probably the basis for his objections on a deeper level?
   Bartleby has special skills and he objects to performing trivial tasks. On a deeper level, he is protesting against society's assumption that he must perform with no consideration for his wishes nor his dignity.
6. What function do the minor characters serve in the story?
   The characters Nipper and Turkey serve as a contrast to Bartleby. They display erratic behavior, at one time discomposed, at another stable. Despite the fact that their behavior cancels one another out (when one is agitated, the other is steadfast, and vice versa), they serve as a contrast to Bartleby's forever consistent behavior.
7. Does the explanation of the acceptance of Bartleby's behavior seem plausible?
   Yes, when the Master in Chancery is convinced that Bartleby's eccentricities are involuntary and that he intends no insolence. (p. 22, col. 2, par. 2)

8. What might account for the Master's feelings of uneasiness about Bartleby's plight?
   The Master seems to feel that his treatment of Bartleby is lacking in compassion and that fate has foisted Bartleby upon him. (p. 22, col. 1, pars. 1–6)
9. What are the various attitudes the Master has toward Bartleby?
   Ideas: Respect, exasperation, pity, perplexity, resentment, charity. From a rather compassionate acceptance of Bartleby and his ways, the narrator moves, perhaps subconsciously, toward denial and betrayal. He removes himself to other offices, denies his kinship with the scrivener, and is in a way responsible for Bartleby's end. The narrator could have done better by the scrivener, and profited in human terms, but lacked the personal strength to do so.
10. What do you think is the purpose of the sequel to Bartleby's death?
    To reiterate Bartleby's failure to communicate his message, the importance of being an individual. The sequel describes Bartleby's fate prior to his job as scrivener. He worked in a dead letter office. Dead letters are absolute proof of failed communication. Dead letters and walls—such were Bartleby's fate in society.

Writing Assignment

In the story you have just read, the central character is an effective symbol for the author's theme. Bartleby represents individuality carried to the extreme. As such, he contrasts sharply to the narrator and the business world he inhabits. Write a brief story revolving around one or more characters. The story may be realistic, but the characters should be symbols of a larger idea or theme.

NOTE: Before beginning a writing assignment remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

O Russet Witch

by F. Scott Fitzgerald

Questions

1. In many of Fitzgerald's works, we see a disillusionment with material wealth. His stories and books often demonstrate the old adage "All that glitters is not gold." In what respect is the story "O Russet Witch" representative of this idea?
   Idea: The "glitter" in Merlin's life is the beautiful, unpredictable flapper he calls Caroline; but the fact that Caroline represents an ideal to Merlin is a telling comment on his shallow personality and drab life. Only to the superficial would she seem glamorous by contrast. In the episodes she plays in his life, Caroline reveals a character pampered by wealth: shallow, willful, and destructive. To the mature person possessed of solid values, she would not be a golden figure. Merlin sees only the glitter—not the corruption beneath.
2. Does Fitzgerald seem to favor one character over another—either Merlin or Caroline—in his treatment of them? How does he get his attitude across?
   Idea: No, Fitzgerald does not favor either character, as is evident by his treatment of them. Merlin he treats with gentle mocking, Caroline with cynicism. One character is a superficial fool, the other a spoiled flapper who ages into a disillusioned, quarrelsome matriarch.
3. What effect, if any, does Caroline have on Merlin's life?
   Idea: Practically-speaking, Caroline has no effect on Merlin's life other than that the episode at the bookstore changes the inventory that Merlin will be selling in the future—old books, rather than new ones. Psychologically-speaking, Caroline represents a false ideal that Merlin pursues throughout his life. Only in his twilight years does he come to terms with the futility of his pursuits. This is what he means when he tells the elderly Alicia Dare, "Understanding is allowed to us old people—after nothing much matters."

4. Explain the title, "O Russet Witch."
   Idea: Caroline/Alicia Dare has russet-colored hair and represents a "bewitching" but negative force in Merlin's life.

Writing Assignment

Most people, during their lives, have an experience that could change the course of their lives if they are willing to allow it. Write a story with alternative endings, in which the main character has such an experience. Write one ending in which the experience has profound effects on the person's life and another in which it has none.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

Of This Time, Of That Place

by Lionel Trilling

Questions

1. While many short stories focus on a single plot line or character or event, "Of This Time, Of That Place" is rich in topics. Name the various elements with which the author concerns himself in the story. With which do you think he is most successful? Why?
   The advantages and disadvantages of academic life, the concerns of one dedicated English professor and published poet, various kinds of people who populate a college campus. Other answers will vary.
2. Define *satire.* What does Trilling satirize in his story? Is he successful? Explain.
   A satire is a literary (or other) work that uses irony and/or sarcasm to ridicule people's behavior. Trilling satirizes the politics of academia and certain kinds of students. Other answers will vary.
3. "Of This Time, Of That Place" has its serious side as well. What is the main point of the story?
   Idea: That Howe the talented poet and individualist sells out to Howe the professor and conformist.
   The sellout occurs when Howe surrenders to Blackburn but not to Tertan. Both students are characterized in the story as "mad," but Blackburn's madness is of a socially acceptable kind. Tertan's madness is that of the eccentric artist, which Howe himself is accused of being—the poet of drunkenness, and so forth. By giving Blackburn a passing grade, which he does not deserve, and by delivering Tertan to the authorities, Howe clearly sides with the more conventional forces in the story.
4. How did Frederic Woolley's criticism of Howe's poetry affect him and other characters in the story?
   Woolley's criticism accuses Howe of a "dangerous subjectivity" and of being a poet of "drunkenness." As such, it identifies Howe with a character like Tertan, who also is perceived as irrational. Howe is disturbed by Woolley's criticism, forced to doubt himself, although he ultimately realizes that the article probably will not have a great effect on his professional future. Tertan views Woolley's words as a kind of bond between him and Howe, two unappreciated men of letters. Blackburn tries to use Woolley's article to "blackmail" Howe. Howe's colleagues seem unconcerned and unimpressed by Woolley's comments.
5. The title of the story is a quote from someone. Who? What is the title's significance?
   The title is a quote from a paper by Ferdinand Tertan on his first day in Howe's class.
   "Tertan I am, but what is Tertan?
   Of this time, of that place, of some parentage,
   what does it matter?"
   Idea: The paper from which the title is gotten, reveals Tertan's brilliance, his eccentric individuality, and his unique mind. He has chosen to respond to Howe's routine assignment in an unconventional way. The title, therefore, captures the essence of the story: individuality vs. conformity.

6. Explain the significance of the following quote:
" 'That's a very fine-looking camera, Hilda.' She touched it with affectionate pride.
'Instruments of precision,' said a voice. 'Instruments of precision.' "

The camera opens and closes the story; brings it full circle. It captures a moment of time, placing Howe in an apparently "fixed" position.

With "instruments of precision," Tertan could easily be referring to Howe, who has allowed himself to become a mere teaching machine, rather than someone concerned with intellectual and spiritual pursuits.

Activity

Many fine stories have been written about teachers and their situations. Choose one or two and read them. You might choose *Good-bye, Mr. Chips* by James Hilton, *Lucky Jim* by Kingsley Amis, or *Good Morning, Miss Dove* by Frances Gray Patton.

Writing Assignments

1. In "Of This Time, Of That Place" Joseph Howe seems primarily concerned with Ferdinand Tertan, the strange but brilliant student. Write a story with another kind of person as the focus: the great athlete, the activities-oriented student, the cheerleader, the eccentric artist, the corporate executive, and so on. Try to make this the story of an individual though, and not of a stereotype. The character should be developed around an event; a description alone does not make a good story.
2. Speculate about what happened to Tertan after his year at Dwight College. Write a story that presents another year in his life.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

The Man That Corrupted Hadleyburg

by Samuel Langhorne Clemens

Questions

1. Briefly summarize Hadleyburg's reputation. Did the stranger corrupt Hadleyburg? Explain your answer.

Honest, upright, proud. Since the townspeople had never been tested, they really didn't know how honest they were; they merely talked about being honest. The stranger did not corrupt them; he merely tested them and brought out their dishonest side.
2. Describe the gold in the sack and how it fits the stranger's feelings about Hadleyburg and his plan for revenge.

The gold coins were actually lead covered in gold; they had the appearance and weight of the real thing. The citizens too were gilded; they were hypocrites, honest and upright on the outside but obviously harboring inside feelings of greed, jealousy, and so on. The stranger wanted the townspeople to see what they really were: gold on the outside, lead on the inside.
3. How did "Howard L. Stephenson" ensure that nineteen particular Hadleyburg men would be tempted by his bait?

Howard L. Stephenson sent each of the nineteen men the same letter, which purported to reveal only to the recipient the information necessary to claim the prize.
4. The name of Barclay Goodson is mentioned several times in the story. Who was Goodson and what happened to him? What makes him a unique character in this story?

Barclay Goodson had moved to Hadleyburg from another town. Although he had not been raised in "incorruptible" Hadleyburg, all the citizens and even the stranger considered him to be the only truly honest and upright person around. Goodson was unique because of his supposed honesty and generosity.
5. Describe the stranger's plan to compensate the Richardses' apparent honesty.

Believing that the Richardses were truly honest, the stranger thought they deserved a large sum of money. At first the coins were auctioned off. When this didn't raise enough money, the stranger bought them and then arranged for Harkness to buy them from him for $40,000. He believed the corrupt townsfolk should literally pay for their dishonesty.

6. While at least nineteen citizens of Hadleyburg seemed to be guilty of the same things, the story focuses on Edward and Mary Richards. Why do you think they fit this part well? Briefly trace Edward's and Mary's "sins" as described throughout the story.
   Edward performed one corrupt act (not testifying as to Burgess's innocence) and Mary supported him when she learned of this. They both coveted the gold, felt they deserved it, needed it for their old age. Even when faced again with the opportunity to be honest (to admit they too had written a letter) they remained corrupt. They represented overt dishonesty and the sin of silence.
7. All nineteen of the citizens of Hadleyburg paid a price for their dishonesty, and the whole town was exposed in the national media. Several of the "incorruptible" citizens, in particular, got their come-uppance: Pinkerton, Harkness, the Richardses, Burgess. Explain how these five individuals got their just deserts.
   Pinkerton lost the election to Harkness. Harkness paid $40,000 for the gold. The Richardses at last couldn't live with their dishonesty, went into a decline, and died. Burgess, who aided the Richardses by telling a lie, had his dishonesty revealed by Richards.
8. What is a moral? What is the moral to be learned from "The Man That Corrupted Hadleyburg"? Briefly state it—in one sentence if possible.
   A moral is a practical lesson to be learned from, for example, a story or experience. Ideas: Practice what you preach; Honesty is the best policy; You reap what you sow; Being a hypocrite doesn't pay.

Activities

1. Read "The Great Stone Face" by Nathaniel Hawthorne, "The Egg" by Sherwood Anderson, and "The Man Who Would be King" by Rudyard Kipling. Compare the morals of the three stories.
2. One of Mark Twain's characteristics was inserting into his nonfiction works threads of pure fiction. Read *Roughing It, A Tramp Abroad, Life on the Mississippi,* or *Following the Equator.* Identify and describe the fictional portions of the book you read.

Writing Assignments

1. While the reader knows that the stranger in "The Man That Corrupted Hadleyburg" has been mistreated, he or she does not know just how. Write a story about the stranger's first visit to Hadleyburg, including the citizens' mistreatment of him and how he learned of Barclay Goodson's character.
2. What important lesson have you learned during your life? Write a story from which a reader can learn the same lesson.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

The Dead

by James Joyce

Questions

1. Using reference works on Joyce and a dictionary, find the meanings of the word *epiphany* and compare them. There is an epiphany in "The Dead." Can you find it and briefly describe it?
   Epiphany: 1. January 6, a church festival; 2. an appearance of a divine being; 3. a sudden realization of the true meaning of something, often as a result of a particular event.

In the early 1900s Joyce wrote a series of short prose passages which he called "epiphanies." He made use of these in his later work.

In "The Dead," Gabriel's "moment of truth" comes toward the end of the story when he learns of Michael Furey and the role he played in Gretta's life. Gabriel realizes how much he loves Gretta, and how great a role the knowledge of death and the dead play in our lives.

2. Which character is the focus in "The Dead"? Describe how this character is developed as the story progresses.

Gabriel is the central character and all the events of the story relate in some way to him. Gabriel enters the story in a good mood which changes with Lily's negative response to his attempt at friendliness. That Kate and Julia rely on his help and kindness is revealed in their concern that he be present when Freddy Malins arrives. As a result of his exchange with Miss Ivors, Gabriel is forced to examine his feelings about Ireland and its traditions. The wonderful dinner and the guests' reactions give Gabriel more cause for reflection and he may have realized the importance of Irish hospitality. Gretta's story about Michael Furey causes him to ponder his own life and relations with others—and with the dead.

3. What is the significance of the title of the story? To whom and/or what is the author referring?

"The Dead" are a principal focus in the story. In one sense, there is a kind of cultural death present at the party. For all its joviality and hospitality, many of those present lack true intellectual or spiritual vitality. They are not truly in touch with the vital forces of life. Witness the drunken Mr. Browne and the pampered Freddy Malins—and even, to some extent, Gabriel himself, who realizes that he has, at times, acted foolishly.

In another sense, "The Dead" actually refers to those who are *dead, to those of another time or generation. Ironically, those dead exert the more positive force in the story. Consider the influence of Michael Furey over Gabriel and his wife at the story's conclusion; or, in the larger view, the influence of the past heritage and traditions of Ireland over the present. As Joyce clearly suggests at the end of the story, the living and the dead will always be joined and united.*

4. Joyce once wrote to his brother Stanislaus that he had not included in his stories enough about the great tradition of Irish hospitality. How does Joyce deal with this in "The Dead"?

"The Dead" is nearly completely set at a great, festive party—a traditional event hosted by Gabriel's aunts. This party seems to provide endless enjoyment for nearly everyone concerned and allows the author to present a vestige of the now dead but once great Irish past and to show its importance.

5. James Joyce is well known for the symbolism in his writings. Symbolism is the literary device of using something tangible and rather simple to represent the intangible—greater truths, ideals, and so on. What symbol did Joyce carry throughout "The Dead"? What does it stand for?

Snow is a central symbol in the story. It grows more intense as the story progresses, and at all points, it represents a life-giving force. Its freshness and vigor are contrasted at times to a rather stultifying atmosphere within the party. Gabriel, for instance, turns his heated face toward the window, longing for the coolness outside. The party at this instance has become too much for him. From these small references throughout the beginning and middle of the story, the snow intensifies at the end into a symbolic chain spreading all across Ireland. This chain enlivens, as well as binds, since it unites those living with those dead.

6. Several characters in "The Dead" represent classes of people with whom Joyce was concerned. Describe what each of the following represents: Aunt Kate, Aunt Julia, Mary Jane; Freddy Malins, Mr. Browne; Miss Ivors.

Aunt Kate, Aunt Julia, and Mary Jane represent Joyce's Irish heritage, Ireland's dead past and its traditions; Freddy Malins and Mr. Browne represent a decadent, irresponsible side of Irish life seemingly disliked by the author; Miss Ivors represents Ireland and that part of its past worth preserving.

Activities

1. Read another story from *Dubliners* (1914) and compare and contrast it with "The Dead."
2. Most of Joyce's work is autobiographical to some extent. Read a biography or several encyclopedia entries on Joyce and compare what you learn about his life with the characters and events in any James Joyce pieces you have read.

Writing Assignment

Write a story with a central character whose perception of life is changed by a particular event.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

To a High Place

by Teo Savory

Questions

1. Compare and contrast Reginald Elphinstone with his brother, Humbert, and Margerain with her sister, Winifred.
   Humbert conducted his life as his father preferred, going to the right school (Oxford or Sandhurst) for the right length of time, entering the appropriate regiment, and so on. Reginald was a free spirit, doing as he pleased. He attended Eton and Trinity and attained even higher education. He concentrated on the academic rather than the physical.

   Of the females, Margerain was the free spirit, attending Cambridge, not marrying, while Winifred was conventional, marrying at a young age and concentrating on the acquisition of material things.
2. From what three points of view is the story told? How does having several points of view help or hinder the story?
   Three points of view: omniscient narrator, Margerain's diary, Reginald's letters. Idea: The three viewpoints, while different, all serve to stress the superiority of Reginald's, and in some cases, Margerain's character. Each viewpoint emphasizes how they see more clearly than their materialistic, old-fashioned, and convention-bound family. Each viewpoint stresses their opposition to a set of values from which they aspire to escape.
3. How are Reginald and Margerain alike? Why did they have such a close relationship? How are they different from other members of the family?
   Both characters are sensitive to others but unconcerned with their opinions; common interests keep their relationship close—they were scholarly; interested in gardens and plants. They differ from other family members who seem to be concerned only with the Elphinstone name, appearances, superficial things.
4. How did Reginald's "little starfish" affect his relationships with members of his family and with other people? What might the hand represent in the story?
   Margerain wasn't offended by the "little starfish"; in fact, she seemed drawn to Reginald because of it. Maud was offended by it, spent little time with her son, thought little of him. Sir Frith wanted him to tuck it in his pocket and do whatever Elphinstones had always done. Humbert's and Winifred's feelings aren't clear. Outsiders didn't seem concerned with the hand; they ignored it. Idea: In a larger sense, the hand can be seen as a symbol of physical and spiritual difference. In the novel, the Chinese, Reginald says, view such a deformity as a "gift of god," or a sign of "good luck." And indeed it is. Physically, Reginald may be limited, but intellectually he rises far above the limits imposed by his birth and upbringing. The purpose of Savory's work is to stress the difference between Reginald and his heritage, and the hand is one way to symbolize that difference.

5. What history and meaning do you see in the poem that concludes the story?
The poem is a history of Reginald's life as well as a description of his search for plants. He was searching for life's meaning in the cultures he encountered, as well as for knowledge. Answers will vary.
6. Reginald spent a great deal of his life among the mountains of Tibet. In what way is this activity symbolic of his character?
Idea: Tibet is often called "the roof of the world." To seek the highest place is a way of seeking to rise above the limits imposed by a class-bound, materialistic, aggressive world. And Reginald, as the story indicates, succeeds in his quest. He attains intellectual and spiritual heights.

Activity

Visit a library and research the following: The bold-face type that appears before the beginning of many chapters is set to resemble an entry from Burke's *Peerage*. What is Burke's *Peerage*? Why did the author use this device?

Writing Assignments

1. "To a High Place" is the story of someone *different*. Often, being different has a great—probably the greatest—influence on a person's life. Write a story about someone different, showing how the difference influenced his or her life.
2. Reginald Elphinstone was born in 1883, a time when a physical deformity or handicap was an embarrassment and often a deterrent to accomplishment. This is not so much the case today. Rewrite the story as if Reginald had been born in 1983.
3. Find an interesting entry in a *Who's Who*, Burke's *Peerage*, or the like, and write a story about the person. The story should be a fictionalized account of how the person came to accomplish what he or she accomplished.

Whalesong

by Robert Siegel

Questions

1. Define *anthropomorphism* and explain how it is used in *Whalesong*.
Anthropomorphism *is the attribution of human and personal characteristics, feelings, and so on, to something not human. The sea animals in* Whalesong *all display human characteristics and feelings: understanding, intelligence, love, sympathy, speech, etc.*
2. How are Hrūna and his family of whales like a human family?
Hrūna and Lewtë "marry" and remain together as a family unit. They support and nourish one another, live in a community, and have a child whom they adore as much as any human parents.
3. What were the monsters described on page 7 of the story? Describe these monsters as you know them.
The monsters were large whaling ships; one may have been a factory ship which processes the whale after it has been caught and killed.
4. According to the story, why was Caloon's death particularly hard on Hrōta?
Caloon was Hrōta's only son, and he had not married. Hrētha, Caloon's mother, had died in childbirth. Hrōta had no living family to support him. He had to depend on the whale community.
5. What are the Humpback whale's two greatest enemies?
Killer whales and humans
6. Using an encyclopedia or dictionary if necessary, briefly define the following: krill, pod, plankton, Ohobo, baleen.
Krill—shrimp; pod—group of whales; plankton—"ocean salad," Ohobo—great storm; baleen—whalebone, takes the place of teeth in some kinds of whales
7. Who was Hralekana? Describe his final act and its effect on Hrūna and the pod.

Hralekana was the Great Whale. He was a huge, very old whale who passed on the Story of how whales came to be. Hralekana gave his life to the whaling ships so the remaining whales could escape. The whales understood and were deeply touched by his sacrifice.

8. Explain the significance of the title, *Whalesong.*
   According to the story, the whales were always singing songs to express their feelings and tell their stories. Each whale had a song to which he or she continually added. Mothers sang to their offspring.
9. Describe the attitude of the sea animals toward humans. Does their attitude change during the course of the story? Do you sympathize with the whales or the whalers? Explain.
   The sea animals quickly learned to fear humans, but they were also curious about them. Many animals thought humans killed for sport rather than for food. The story ended with the animals hoping that humans would learn to "live in peace with all creatures." Other answers will vary.
10. What was the author's purpose in writing *Whalesong*? Do you think he achieved it? Explain.
    Answers will vary. Idea: The author wanted to show how much control humans have over the future of the world and how animals, particularly the endangered ones, view humans. Possibly the author wanted humans to realize their power and to see that they must harness it for the preservation of the world and all its occupants rather than for its destruction.

Activities

1. Another book in which anthropomorphism is extensively used is *The Wind in the Willows* by Kenneth Grahame. Borrow this book from the library and compare the two authors' use of this device.
2. Use an encyclopedia or book about whales to learn about them. Compare what you learn there with what you learned in *Whalesong*. Is the author of *Whalesong* true to the real-life habits and behaviors of whales? Does he do a good job presenting their point of view? Explain, using examples from the novel.

Writing Assignments

1. Read about the habits of a kind of animal you particularly like. Then, using anthropomorphism, write a story with this kind of animal as the character(s).
2. Choose one of the major events of the story (the visit to Hralekana, the Lonely Cruise, the Plunge, the freeing of Lewtë, the death of Hralekana) and write a "whalesong."

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

Family Happiness

by Leo Tolstoy

Questions

1. Summarize the evolution of the relationship between Sergéy Mikháylych and Márya Alexándrovna, the narrator of the story. Do you think that either Sergéy or Márya behaved purposefully, that is, with marriage in mind? Explain why you think as you do.
   Sergéy's feelings changed from affection for a child into love for a woman. For a very long time he entertained no thought of marrying anyone—let alone Márya. As he visited with her and saw her mature, his love grew. Márya thought of Sergéy only as a kind neighbor. At seventeen she considered him to be the opposite of what she desired in a husband. After she had grown up and gotten to know Sergéy as an adult, her feelings changed to love and she came to think of marrying him. Answers will vary.
2. Describe how the two main characters change over the course of the story. Explain why they behave as they do and why their behavior changes.

Probably because of the difference in age, and, therefore, the difference in experience, the relationship of Márya and Sergéy goes through several stages. First the newness of the relationship and the marriage bind the two together; they are infatuated with one another. After a few years of marriage, Sergéy, who is nearly twenty years older than Márya, settles into the comfortable routine of marriage, content to be with his wife and family. Márya, still young and in want of excitement, grows bored and longs for company and parties. In the end, they realize what is really important to them: one another and their children.

3. From whose point of view is "Family Happiness" told? Do you think the fact that a man wrote the story from a woman's point of view colored the story? Did Tolstoy seem to understand Márya as well as Sergéy? Explain your opinion.
   The story is told from Márya's point of view. Answers to the second part of question will vary. Idea: Tolstoy seems to be fair to both Márya and Sergéy, presenting both the positive and negative qualities of each. The differences between them may result not so much from the difference in their sexes but from the differences of youth and middle age.
4. Explain the allusion, which appears on page 129 of the story: "here we are little Croesuses, but in town we shall not be at all rich."
   Croesus was the last king of Lydia, which he ruled from 560-546 B.C. *He was renowned for his vast riches. Sergéy was saying that in the country he and Márya were considered quite wealthy, but in town, when compared with people of such vast wealth, they would seem quite ordinary.*
5. "Society" plays a great part in the lives of the affluent landholders of Russia during the period in which the story takes place. Describe this society and explain the role it plays in Márya's and Sergéy's lives and their varying attitudes toward it.
   The society *of "Family Happiness" is a group of affluent individuals who consider themselves a very special leisure class. These persons think of themselves as the arbiters of good taste, fashion, manners, and so on. They are the givers of the great social gatherings. Because she had come from such a provincial and sheltered life, society was exciting and very important to Márya. Sergéy had already seen society and determined it to be boring, shallow, and meaningless.*

Activities

1. Visit a library and borrow another work by Leo Tolstoy. After you read it, put your new knowledge to work. You might choose Anna Karenina and compare the romantic relationships in that novel with that of "Family Happiness," or you might choose one of his nonfiction works and write a review of it.
2. Leo Tolstoy was a social reformer as well as a writer. One of his concerns was the treatment of the peasant class. Visit a library and research the plight of the peasants during Tolstoy's lifetime. Did their situation change during this period? during the Russian Revolution of 1917? How?

Writing Assignments

1. In "Family Happiness" Tolstoy took two rather ordinary people and turned their relationship, courtship, and marriage into a touching story of how excitement and romance can evolve into mature, stable, and longlasting love. Think of a relationship you have had (or someone close to you has had) and write a story about how the relationship *evolved*, matured, over a period of time. Don't limit yourself to love; a strong friendship can also provide the basis for a good story.
2. "Youth" and "maturity" often provide very different perspectives on a single situation. Write two fairly brief descriptions of an incident—one told from the viewpoint of a young person, the other from that of a middle-aged adult. The two descriptions should reflect the differences in age and experience.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book.

The Crazy Hunter

by Kay Boyle

Questions

1. What difference between Nan and her mother is revealed by their behavior in the rescue of the wounded bird in the early part of the story? What similarities?

   Difference: The older woman is fearless and unsentimental; her daughter is frightened and empathetic. Similarities: Both value life enough to try to rescue the bird and both are concerned that it should survive after it has been rescued.

2. Both Mrs. Lombe and her husband are compared, at different times in the story, to the blind horse Brigand. Describe the circumstances of each analogy, and what you feel the author hoped to achieve with it.

   Nan compares her mother, as a disabled young woman who might have died without care, to Brigand, who also needs care; the author intended to show how deeply Nan was attached to the horse. Candy compares himself to Brigand, as having no value to anyone; the author may have been foreshadowing the final scene of the story, in which Candy defends the animal's life with his own.

3. The story reveals Nan's obsession with preserving the life of the blind horse. Describe some incidents that demonstrate this obsession.

   Ideas: The fireplace discussion with the local veterinarian, her hysterical refusal to allow the London veterinarian to kill the horse, the jumping session on the rainy night, her refusal to be gone for more than one day when she is invited to a wedding.

4. Mr. and Mrs. Lombe seem as different as night and day, yet there is one subject that draws them together, and on which they agree. What is it?

   Their love for their daughter.

5. In *Crazy Hunter*, Kay Boyle explores the complex interrelationships among three members of a family. Choose two of them and describe their relationship, using events and quotes from the story.

   Answers will vary.

6. The story contains many plot lines, some of which are satisfactorily tied up at the end of the story, and most of which are not. Describe at least three that are not.

   Answers will vary. Some possibilities are: the outcome of Nan's relationship with Sheehan, whether Nan is allowed to return to Europe by her parents, whether she adapts to the fact that she is growing up, how Candy's defense of Brigand affects his relationship with his wife and daughter and his self-esteem, how Mrs. Lombe's attempt to kill Brigand in Nan's absence affects her relationship with her daughter, whether Brigand eventually adapts to his blindness or is killed.

7. The story contains a strong central conflict. It might be described as a conflict between the "soft" side of the human (sentimentality, frailty, compassion) and the "strong" side (cold competence, logic, and reason). Discuss the story in terms of this conflict. Which side wins?

   The two sides are obviously represented by Nan, Candy, and the Crazy Hunter at one pole and Mrs. Lombe and her cohorts at the other. It is ironic, in a sense, that the mother is so logical and reasonable, so lacking in sentiment or compassion. She herself was a sickly girl, near death, at one point also weak and dependent. But now she has put the past behind her, and she has nothing but contempt for her daughter's and her husband's attachments to what she considers is a useless animal. With all her strength, however, it is ambiguous as to whether she wins. At the end, Candy's sentimental, drunken heroics has gained at least a stalemate. The destruction of the horse is put off, at least until another day. In the last respect, the author does not say who wins, but she makes her point: even in a world where the strong rule, there is room for human tenderness, however illogical.

Writing Assignments

1. In this novel, the action revolves around the horse as the central symbol. The list of works, including the famous *Moby Dick*, which duplicate this technique, are many. Try one yourself. Write a story in which an animal functions as a symbol, tying the characters and the action together.
2. Choose one or more of the unresolved issues that were discussed in question 6. Write a story that goes beyond Boyle's ending and that resolves the issue or issues chosen.

NOTE: Before beginning a writing assignment, remember to do a clustering exercise. Instructions and a sample exercise appear in your Student Record Book, page 110.

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9 B
10 C
11 A
12 lack
13 flex
14 six
15 sick
16 tax
17 speck
18 we'll
19 haven't
20 wouldn't
21 doesn't
22 you've
23 he'd
24 she'd
25 he's
26 inactive
27 retell
28 recall
29 indefinite
30 inaccurate
31 rebound
32 inconsiderate
33 refill

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 C
2 C
3 C
4 B
5 B
6 C
7 A

LEARN ABOUT WORDS

1 survive
2 guides
3 humid
4 retracing
5 hacking
6 rapids
7 C
8 C
9 A
10 B
11 C
12 work
13 sailor
14 worker
15 furnish
16 flirt
17 awkward
18 hard
19 hard
20 soft
21 soft
22 hard
23 soft
24 hard
25 soft
26 silent
27 f
28 f
29 f
30 silent
31 f
32 silent
33 silent

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 C
2 A
3 B
4 B
5 C
6 C
7 C

LEARN ABOUT WORDS

1 outfit
2 prized
3 prevented
4 occasionally
5 sling
6 deserves
7 C
8 B
9 B
10 B
11 B
12 color
13 hurl
14 church
15 teacher
16 collar
17 third
18 hard
19 soft
20 soft
21 hard
22 soft
23 hard
24 hard
25 soft
26 silent
27 silent
28 f
29 f
30 silent
31 silent
32 silent
33 f

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 C
2 A
3 B
4 A
5 C
6 B
7 B

LEARN ABOUT WORDS

1 cherished
2 envious
3 denouncing
4 chide
5 din
6 dismayed
7 C
8 A
9 C
10 A
11 B
12 short
13 long
14 short
15 short
16 short
17 long
18 dish
19 thought
20 church
21 wheel
22 clash
23 shirk
24 whimper
25 chocolate
26 moaned
27 hopping
28 grooming
29 meets
30 passes
31 tapping
32 bumping
33 despaired

HOW WELL DID YOU READ?

1 A
2 C
3 A
4 C
5 A
6 C
7 B

LEARN ABOUT WORDS

1 route
2 cape
3 keg
4 settlers
5 unity
6 modern
7 A
8 C
9 B
10 B
11 A
12 trick
13 ax
14 snack
15 lick
16 fix
17 track
18 ha
19 o
20 i
21 a
22 o
23 ha
24 o
25 a
26 unaware
27 unimportant
28 reopen
29 untrue
30 reconsider
31 unpleasant
32 unusual
33 replace

HOW WELL DID YOU READ?

1 C
2 C
3 A
4 B
5 C
6 C
7 C

LEARN ABOUT WORDS

1 long
2 wheeled
3 idle
4 heed
5 frantically
6 mourned
7 B
8 C
9 C
10 A
11 A
12 break / fast
13 police / man
14 store / house
15 air / mail
16 pass / port
17 bag / pipes
18 climb
19 flute
20 slice
21 sample
22 thimble
23 purple
24 eagle
25 bicycle
26 different
27 same
28 different
29 same
30 different
31 same
32 different
33 different

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 C
3 A
4 B
5 C
6 A
7 B

LEARN ABOUT WORDS

1 data
2 splotched
3 bombarded
4 particles
5 spewed
6 crystallizes
7 A
8 C
9 B
10 A
11 A
12 long
13 short
14 long
15 long
16 short
17 short
18 fish
19 white
20 thickly
21 crash
22 chuckle
23 whoop
24 charming
25 thrifty
26 repairing
27 drummed
28 gleams
29 skipping
30 zooming
31 heats
32 crushes
33 lumped

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 B
3 A
4 C
5 B
6 C
7 C

LEARN ABOUT WORDS

1 insisted
2 thirst
3 stared
4 glided
5 staggered
6 astonished
7 A
8 B
9 C
10 C
11 B
12 silver / ware
13 guide / book
14 after / thought
15 book / case
16 horse / back
17 bed / room
18 please
19 enclose
20 slumbering
21 slope
22 bugle
23 complete
24 stumble
25 reflect
26 same
27 same
28 different
29 same
30 different
31 same
32 different
33 same

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 B
3 A
4 B
5 B
6 C
7 C

LEARN ABOUT WORDS

1 tallow
2 code
3 revolving
4 might
5 distress
6 centuries
7 B
8 C
9 B
10 B
11 C
12 Z
13 S
14 S
15 Z
16 S
17 Z
18 ha
19 o
20 no
21 a
22 i
23 o
24 a
25 o
26 redo
27 unjust
28 reproduce
29 unusual
30 reconstruct
31 unequal
32 rerun
33 unclaimed

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 A
3 B
4 B
5 C
6 A
7 C

LEARN ABOUT WORDS

1 excavate
2 precaution
3 procedures
4 frayed
5 pondered
6 writhing
7 A
8 B
9 B
10 C
11 A
12 pay / roll
13 sick / room
14 drive / way
15 pipe / line
16 high / way
17 broad/ cast
18 please
19 glisten
20 blubber
21 reply
22 parsley
23 reflect
24 claim
25 cliff
26 same
27 different
28 same
29 different
30 same
31 same
32 different
33 same

HOW WELL DID YOU READ?

1 C
2 C
3 A
4 B
5 B
6 C
7 C

LEARN ABOUT WORDS

1 besieged
2 site
3 mounted
4 squandered
5 remnants
6 excavations
7 C
8 B
9 C
10 A
11 C
12 long
13 short
14 short
15 short
16 long
17 long
18 rich
19 sunshine
20 thorough
21 which
22 flinch
23 relish
24 thirty
25 wash
26 grasses
27 doomed
28 steaming
29 slapped
30 beats
31 loaned
32 clumping
33 stopping

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 C
3 A
4 B
5 C
6 B
7 C
8 C

LEARN ABOUT WORDS

1 basic
2 ancient
3 popular
4 fortified
5 nourishing
6 glossy
7 B
8 B
9 B
10 C
11 C
12 brain
13 labor
14 breeze
15 angular
16 hundred
17 lion
18 mail
19 only
20 dreadful
21 grieve
22 bunny
23 tartan
24 fat
25 attack
26 stand
27 church
28 hitch
29 whose
30 pattern
31 toward
32 regress
33 scribble

HOW WELL DID YOU READ?

1 C
2 B
3 B
4 A
5 B
6 A
7 C
8 A

LEARN ABOUT WORDS

1 photogenic
2 bookings
3 academic
4 chaperoned
5 eccentric
6 pursuing
7 B
8 A
9 C
10 A
11 C
12 impractical
13 frame
14 secret
15 dropped
16 bread
17 grain
18 entrance
19 twist
20 steam
21 swimming
22 stem
23 spinning
24 whisper
25 history
26 scold
27 P
28 P
29 N
30 P
31 P
32 N
33 N

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 A
3 A
4 B
5 C
6 B
7 B
8 A

LEARN ABOUT WORDS

1 eased
2 geyser
3 quiver
4 thud
5 pommel
6 wheeled
7 C
8 B
9 C
10 B
11 A
12 crumb
13 reign
14 knit
15 plumber
16 gnaw
17 knife
18 dumb
19 older
20 greatest
21 lightest
22 taller
23 shortest
24 richer
25 fonder
26 quieter
27 moist
28 loyal
29 voice
30 eight
31 obey
32 weigh
33 destroy

HOW WELL DID YOU READ?

1 C
2 C
3 B
4 B
5 B
6 A
7 B
8 C

LEARN ABOUT WORDS

1 comical
2 astray
3 investigating
4 swerved
5 undaunted
6 identical
7 A
8 A
9 B
10 B
11 A
12 sign
13 bombing
14 knot
15 doubt
16 thumb
17 kneel
18 foreign
19 smallest
20 brighter
21 fairer
22 warmer
23 tightest
24 soonest
25 poorest
26 shorter
27 breath
28 stead
29 feather
30 survey
31 deaf
32 fey
33 tread

HOW WELL DID YOU READ?

1 C
2 B
3 B
4 C
5 C
6 B
7 C
8 C

LEARN ABOUT WORDS

1 shattered
2 feat
3 expedition
4 sledges
5 island
6 determination
7 B
8 A
9 C
10 B
11 C
12 in sīde′
13 par tĭc′ u lar
14 păl′ let
15 pre tĕnd′
16 re bĕl′ lion
17 ŏb′ ject
18 grā′ vy
19 merciful
20 merciless
21 remorseful
22 penniless
23 thoughtless
24 thoughtful
25 blameless
26 heedless
27 fowl
28 for
29 dyed
30 ewe
31 fare
32 colonel
33 dew

HOW WELL DID YOU READ?

1 C
2 B
3 C
4 B
5 B
6 B
7 C
8 C

LEARN ABOUT WORDS

1 scavenging
2 silhouette
3 tread
4 motionless
5 observations
6 launching
7 A
8 B
9 A
10 B
11 A
12 hāte′ ful
13 bĭd′ den
14 cra văt′
15 re dūce′
16 lā′ zy
17 per hăps′
18 nā′ tive
19 jobless
20 needful
21 meaningless
22 cheerless
23 cheerful
24 endless
25 friendless
26 restful
27 sew
28 Some
29 sun
30 buy
31 cell
32 deer
33 days

HOW WELL DID YOU READ?

1 A
2 B
3 C
4 A
5 C
6 A
7 B
8 B

LEARN ABOUT WORDS

1 debating
2 mystified
3 converted
4 majored
5 reflects
6 expertise
7 C
8 C
9 B
10 C
11 A
12 cry
13 letter
14 hand
15 favorite
16 quickly
17 bear
18 painted
19 south
20 provide
21 hear
22 cub
23 glory
24 twin
25 moat
26 leek
27 quote
28 profit
29 shoddy
30 about
31 chide
32 eat
33 deter

HOW WELL DID YOU READ?

1 B
2 C
3 A
4 A
5 A
6 C
7 B
8 C

LEARN ABOUT WORDS

1 frenzied
2 threat
3 photographer
4 punctures
5 fascinated
6 donned
7 B
8 A
9 B
10 C
11 C
12 express
13 friendly
14 brushes
15 truth
16 driving
17 crumbs
18 growing
19 spirit
20 sweater
21 smoky
22 stem
23 misspelled
24 sneeze
25 mistake
26 wasp
27 rebound
28 unlikely
29 unnecessary
30 refund
31 unearned
32 repair
33 unfamiliar

HOW WELL DID YOU READ?

1 B
2 C
3 C
4 C
5 B
6 A
7 B
8 B

LEARN ABOUT WORDS

1 lee
2 blunder
3 splinters
4 raked
5 gulch
6 ruin
7 C
8 A
9 A
10 C
11 B
12 ch
13 school
14 machine
15 ch
16 echo
17 ch
18 christen
19 whiter
20 ugliest
21 hungriest
22 darker
23 thirstier
24 coldest
25 fancier
26 worthiest
27 bo͞oming
28 fo͞od
29 wo͝od
30 mo͞od
31 bro͞om
32 bro͝ok
33 go͝odness

HOW WELL DID YOU READ?

1 C
2 C
3 A
4 B
5 A
6 C
7 A
8 A

LEARN ABOUT WORDS

1 luscious
2 flourish
3 discontent
4 famished
5 wane
6 mingled
7 C
8 A
9 B
10 C
11 C
12 drizzling
13 impress
14 ground
15 trunk
16 afraid
17 increase
18 celebrate
19 scribble
20 test
21 smiling
22 strong
23 story
24 clasp
25 snob
26 just
27 P
28 N
29 N
30 P
31 N
32 P
33 P

HOW WELL DID YOU READ?

1 C
2 C
3 C
4 B
5 C
6 B
7 A
8 C

LEARN ABOUT WORDS

1 chatted
2 inspiration
3 foresee
4 rage
5 translated
6 serial
7 B
8 A
9 C
10 B
11 B
12 parents
13 over
14 gracious
15 beggar
16 England
17 opportunity
18 ankle
19 thistle
20 cup
21 save
22 brain
23 elephant
24 frog
25 prose
26 nugget
27 fishing
28 payday
29 sequin
30 cut
31 purpose
32 haven
33 option

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 A
3 B
4 C
5 A
6 B
7 A
8 C
9 C

LEARN ABOUT WORDS

1 concealed
2 revenge
3 temptation
4 cunning
5 roguish
6 casual
7 darted
8 A
9 C
10 B
11 C
12 B
13 eagle
14 paint
15 loaf
16 leaf
17 load
18 stream
19 steam
20 trem / ble
21 span / gle
22 buck / le
23 gar / gle
24 twin / kle
25 an / kle
26 cy / cle
27 misplace
28 disorganized
29 disagree
30 misfortune
31 misstep
32 disappear
33 misname

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 C
3 A
4 B
5 A
6 C
7 C
8 C
9 C

LEARN ABOUT WORDS

1 twitching
2 thicket
3 squash
4 urgent
5 agony
6 deadly
7 raised
8 C
9 B
10 A
11 A
12 C
13 comma
14 derby
15 van
16 kitchen
17 excellent
18 radish
19 ghost
20 coffee
21 British
22 success
23 prunes
24 woman
25 muddy
26 brown
27 pram
28 foggy
29 gray
30 hiccup
31 stem
32 what
33 abhor

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 C
3 A
4 A
5 C
6 B
7 A
8 C
9 A

LEARN ABOUT WORDS

1 extraordinary
2 competitive
3 investment
4 sterile
5 focus
6 aphorisms
7 adheres
8 B
9 C
10 A
11 B
12 C
13 ten / der
14 as / pic
15 bam / boo
16 cir / cus
17 hel / met
18 ban / dit
19 let / ter
20 gladly
21 coldly
22 promptly
23 strongly
24 boastful
25 darkly
26 exactly
27 fix
28 master
29 differ
30 honor
31 say
32 free
33 faith

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 A
3 C
4 A
5 C
6 C
7 C
8 C
9 B

LEARN ABOUT WORDS

1 grizzled
2 relentlessly
3 futile
4 grimly
5 loom
6 plummeted
7 din
8 C
9 B
10 C
11 A
12 B
13 soak
14 plead
15 train
16 peach
17 seat
18 plain
19 grain
20 shin / gle
21 whis / tle
22 sin / gle
23 wrin / kle
24 wrig / gle
25 knuck / le
26 a / ble
27 misunderstand
28 disobey
29 misspell
30 disregard
31 disprove
32 distrust
33 misrule

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 B
3 B
4 A
5 B
6 C
7 C
8 A
9 C

LEARN ABOUT WORDS

1 sulking
2 chagrin
3 excelsior
4 obligation
5 compelled
6 conviviality
7 mugged
8 C
9 B
10 A
11 A
12 B
13 so / lo
14 ve / to
15 la / bor
16 di / van
17 ba / sin
18 va / cant
19 mo / lar
20 I'll
21 mustn't
22 you've
23 they'll
24 he's
25 we're
26 wouldn't
27 some / one
28 near / by
29 stage / coach
30 thread / bare
31 under / water
32 note / book
33 sharp / shooter

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 A
3 B
4 C
5 C
6 B
7 B
8 B
9 B

LEARN ABOUT WORDS

1 phenomenon
2 organisms
3 stimulated
4 evaporates
5 numerous
6 complex
7 moistened
8 A
9 C
10 C
11 C
12 A
13 framework
14 interest
15 kite
16 barge
17 wild
18 quick
19 aphid
20 turnip
21 empire
22 frail
23 up
24 story
25 fragrant
26 knife
27 ruby
28 jam
29 clasp
30 knave
31 Indian
32 vial
33 open

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 C
3 A
4 C
5 B
6 A
7 B
8 A
9 C

LEARN ABOUT WORDS

1 inspiration
2 sharecropper
3 will
4 collide
5 flaws
6 novel
7 prestigious
8 B
9 C
10 A
11 A
12 C
13 păl—pāĭl
14 băt—bāĭt
15 mĕt—mēát
16 săt—sēát
17 măd—māĭd
18 rŏd—rōád
19 gŏt—gōát
20 hus / tle
21 sick / le
22 pur / ple
23 dwin / dle
24 this / tle
25 peb / ble
26 chuck / le
27 miscount
28 dislike
29 misinform
30 disloyal
31 misfire
32 disorder
33 mispronounce

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 C
3 B
4 B
5 C
6 B
7 C
8 C
9 A

LEARN ABOUT WORDS

1 dent
2 crater
3 grated
4 reinforced
5 cruised
6 porous
7 fickle
8 C
9 C
10 B
11 B
12 B
13 file
14 next
15 edge
16 floor
17 driver
18 apt
19 cattle
20 owl
21 avoid
22 prefer
23 starch
24 rope
25 useful
26 tub
27 halyard
28 ice
29 jubilee
30 nearly
31 make
32 knapsack
33 ledger

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 B
3 C
4 A
5 B
6 A
7 B
8 C
9 C

LEARN ABOUT WORDS

1 acrid
2 incredulous
3 elliptical
4 incised
5 matrix
6 millennia
7 absurdity
8 A
9 C
10 C
11 B
12 A
13 me / ter
14 to / tal
15 ra / zor
16 ze / ro
17 so / ber
18 ha / lo
19 fi / nal
20 i
21 o
22 o
23 ha
24 i
25 ha
26 a
27 news / paper
28 out / standing
29 arm / chair
30 over / looked
31 dish / cloth
32 spear / head
33 speed / boat

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 C
2 B
3 C
4 C
5 B
6 C
7 B
8 A
9 B

LEARN ABOUT WORDS

1 accurate
2 barren
3 primitive
4 remote
5 immersed
6 slick
7 grotesque
8 A
9 B
10 A
11 C
12 C
13 dif / fer
14 gar / bage
15 pas / ture
16 can / cer
17 bar / ley
18 mat / ter
19 fol / low
20 quickly
21 sadly
22 quietly
23 thoroughly
24 purely
25 clearly
26 hoarsely
27 close
28 side
29 room
30 make
31 press
32 hope
33 law

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 C
2 A
3 C
4 C
5 A
6 C
7 C
8 C
9 C

LEARN ABOUT WORDS

1 coast
2 inserts
3 groove
4 megaphone
5 pure
6 duration
7 ignored
8 C
9 A
10 A
11 C
12 C
13 fe / ver
14 ba / con
15 spi / der
16 tu / lip
17 la / bor
18 li / lac
19 cu / pid
20 you're
21 we've
22 they'd
23 he'd
24 she'll
25 I'll
26 he's
27 mouse / traps
28 pocket / book
29 table / cloth
30 hair / brush
31 wall / paper
32 shot / gun
33 gate / keeper

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 A
3 C
4 B
5 B
6 A
7 B
8 A
9 C

LEARN ABOUT WORDS

1 depicting
2 peered
3 detached
4 radiating
5 inserted
6 demonstrated
7 technique
8 reception
9 A
10 C
11 B
12 C
13 B
14 farm / er
15 storm / ing
16 buy / er
17 re / turn / ing
18 weld / er
19 pol / ish / er
20 stag / ger / ing
21 not
22 not
23 in
24 not
25 in
26 in
27 humorist
28 doorman
29 copyist
30 iceman
31 herdsman
32 countryman
33 artist

HOW WELL DID YOU READ?

1 A
2 A
3 B
4 A
5 A
6 C
7 A
8 A
9 B

LEARN ABOUT WORDS

1 scandalized
2 folly
3 redoubtable
4 dingy
5 exulted
6 venture
7 glibly
8 facility
9 A
10 B
11 B
12 A
13 C
14 laugh / a / ble
15 hy / phen
16 cash / ier
17 weath / er
18 be / whisk / ered
19 plung / er
20 in / quire
21 prepare
22 pervade
23 perambulate
24 perennial
25 prepaid
26 perforate
27 mousetrap
28 horseshoe
29 grapevine
30 roommate
31 highchair
32 bookworm
33 spaceship

HOW WELL DID YOU READ?

1 C
2 C
3 A
4 B
5 B
6 A
7 C
8 B
9 C

LEARN ABOUT WORDS

1 menagerie
2 headway
3 improvise
4 bottlenecks
5 evident
6 troughs
7 debris
8 spectators
9 B
10 B
11 B
12 C
13 B
14 looked
15 romped
16 mend / ed
17 hunt / ed
18 wast / ed
19 plant / ed
20 filled
21 walked
22 fight
23 succeed
24 discard
25 rags
26 emptied
27 peel
28 plain
29 reign
30 scene
31 slay
32 mustered
33 chord

HOW WELL DID YOU READ?

1 B
2 B
3 C
4 A
5 C
6 A
7 B
8 C
9 B

LEARN ABOUT WORDS

1 imbibed
2 grisly
3 dotty
4 serenely
5 conventional
6 disconsolately
7 brandished
8 mused
9 B
10 A
11 C
12 A
13 C
14 de / liv / er / er
15 press / ing
16 seal / ing
17 work / ing
18 truck / er
19 re / turn/ ing
20 bear / er
21 not
22 in
23 not
24 not
25 in
26 not
27 boyish
28 sharpness
29 softness
30 clownish
31 dullness
32 boorish
33 pleasantness

HOW WELL DID YOU READ?

1 A
2 C
3 A
4 C
5 B
6 C
7 B
8 B
9 A

LEARN ABOUT WORDS

1 noteworthy
2 dramatic
3 complex
4 distributed
5 uniform
6 tattered
7 discarded
8 torrents
9 B
10 B
11 C
12 A
13 C
14 ungenerous
15 impolite
16 unlimited
17 retreat
18 impossible
19 resound
20 unconcerned
21 P
22 N
23 N
24 P
25 N
26 N
27 lasting
28 increasing
29 enjoy
30 avowing
31 warily
32 compose
33 provision

HOW WELL DID YOU READ?

1 B
2 A
3 B
4 yes
5 no
6 yes
7 yes
8 no
9 A

LEARN ABOUT WORDS

1 accent
2 emerged
3 ceded
4 lyrical
5 prosper
6 replenish
7 fertile
8 descent
9 C
10 C
11 A
12 A
13 B
14 improbable
15 recapture
16 recall
17 unobserved
18 unusable
19 immortal
20 unusual
21 P
22 N
23 P
24 P
25 N
26 P
27 vegetate
28 imposter
29 opinion
30 tithe
31 clam
32 present
33 resist

HOW WELL DID YOU READ?

1 C
2 B
3 C
4 C
5 B
6 B
7 B
8 B
9 A

LEARN ABOUT WORDS

1 handyman
2 resembled
3 restraints
4 resentful
5 reliability
6 participate
7 bleak
8 significant
9 B
10 C
11 A
12 A
13 C
14 soil
15 grieve
16 cow / ard
17 neu / tral
18 roy / al
19 nau / ti / cal
20 scour
21 collaborate
22 coaxial
23 conjoin
24 correlate
25 combine
26 conversation
27 sleepyhead
28 cloverleaf
29 toothbrush
30 townspeople
31 treadmill
32 lineup
33 wallpaper

HOW WELL DID YOU READ?

1 A
2 C
3 B
4 B
5 B
6 B
7 A
8 B
9 B

LEARN ABOUT WORDS

1 harvested
2 centuries
3 conception
4 promote
5 obstacles
6 conduits
7 efficiency
8 ingenious
9 B
10 C
11 C
12 B
13 A
14 lashed
15 buzzed
16 fished
17 glid / ed
18 treat / ed
19 carved
20 dat / ed
21 usual
22 receive
23 plant
24 probably
25 plain
26 work
27 pealing
28 route
29 guest
30 sail
31 heel
32 hall
33 wring

HOW WELL DID YOU READ?

1 B
2 C
3 A
4 B
5 A
6 C
7 C
8 A
9 B

LEARN ABOUT WORDS

1 communion
2 rectory
3 habitation
4 snipe
5 coincidence
6 delusion
7 infirmities
8 mackintosh
9 B
10 A
11 A
12 B
13 C
14 undecorated
15 impure
16 unfathomed
17 return
18 ungrateful
19 rebound
20 impolite
21 N
22 N
23 P
24 P
25 P
26 N
27 willingness
28 chard
29 sequel
30 admit
31 custodian
32 sentry
33 timid

HOW WELL DID YOU READ?

1 B
2 A
3 C
4 C
5 B
6 B
7 C
8 A
9 A

LEARN ABOUT WORDS

1 prehistory
2 hominids
3 evolved
4 alacrity
5 superseded
6 commensurate
7 precursors
8 bipedalism
9 A
10 C
11 A
12 C
13 B
14 bolt / ed
15 wait / ed
16 wad / ed
17 part / ed
18 gushed
19 post / ed
20 halt / ed
21 driving
22 colors
23 dry
24 simple
25 roundest
26 never
27 boulder
28 sealing
29 chute
30 cite
31 corps
32 scent
33 pier

HOW WELL DID YOU READ?

1 A
2 C
3 B
4 C
5 B
6 A
7 A
8 C
9 C

LEARN ABOUT WORDS

1 traditional
2 sparse
3 hardy
4 cluster
5 annual
6 yearned
7 browse
8 crafts
9 C
10 B
11 C
12 B
13 C
14 cow / ard
15 toil / er
16 cloud / less
17 claw / ing
18 con / ceive
19 boun / ty
20 pneu / mat / ic
21 depression
22 extend
23 depart
24 defer
25 exclude
26 exception
27 spearhead
28 toothache
29 treetop
30 boatload
31 limelight
32 notebook
33 seacoast

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 C
3 A
4 B
5 B
6 C
7 B
8 A
9 B
10 C

LEARN ABOUT WORDS

1 entrust
2 discomfort
3 inured
4 expended
5 component
6 impeding
7 subcutaneous
8 legacy
9 B
10 C
11 A
12 A
13 A
14 loyalty
15 legality
16 clarity
17 poverty
18 majesty
19 unity
20 beauty
21 velocity
22 reality
23 pair
24 raise
25 pare
26 raze
27 pear
28 rays
29 fly-by-night
30 let fly
31 fly in the face of
32 fly at
33 on the fly

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 B
3 B
4 B
5 C
6 B
7 B
8 A
9 C
10 C

LEARN ABOUT WORDS

1 inferior
2 struggling
3 garret
4 cunning
5 meager
6 lumbering
7 occasion
8 speculations
9 B
10 A
11 C
12 C
13 C
14 perhaps
15 absent
16 abstain
17 perfect
18 permit
19 abject
20 persist
21 abolish
22 peruse
23 haphazard
24 unfeeling
25 fresh
26 despise
27 churlishly
28 lucky
29 heartened
30 plentiful
31 dawdled
32 shy
33 smooth

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 B
3 B
4 A
5 C
6 B
7 A
8 A
9 C
10 B

LEARN ABOUT WORDS

1 insignificance
2 inferno
3 stationary
4 systematically
5 corroborating
6 supple
7 interrogation
8 incredible
9 C
10 A
11 C
12 C
13 B
14 act
15 grand
16 copy
17 head
18 joy
19 sign
20 tract
21 port
22 verb
23 frightening
24 inside
25 feeling
26 turned
27 stiffly
28 memory
29 continued
30 importance
31 studied
32 burned
33 first

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 C
2 B
3 B
4 A
5 C
6 B
7 C
8 C
9 B
10 B

LEARN ABOUT WORDS

1 bizarre
2 combed
3 somnambulist
4 veterinarian
5 controversy
6 vivid
7 nocturnal
8 curiously
9 A
10 A
11 B
12 C
13 B
14 suppose
15 substance
16 succeed
17 suffocate
18 surround
19 suggest
20 suffer
21 summon
22 support
23 subject
24 bored
25 simple
26 reality
27 discourteous
28 safe
29 specifically
30 slipshod
31 innocent
32 minimized
33 permanent

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 C
3 B
4 B
5 A
6 B
7 C
8 B
9 C
10 C

LEARN ABOUT WORDS

1 quarry
2 prized
3 specimen
4 vulnerable
5 indefinitely
6 fictitious
7 consider
8 pursue
9 A
10 C
11 B
12 B
13 B
14 hopeless
15 happiness
16 merciless
17 lawless
18 hopelessness
19 coolness
20 mercilessness
21 reckless
22 hapless
23 chord
24 cord
25 boar
26 cored
27 bore
28 give oneself airs
29 on the air
30 walk on air
31 take the air
32 up in the air
33 air castle

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 A
3 C
4 A
5 B
6 C
7 B
8 A
9 C
10 A

LEARN ABOUT WORDS

1 dismissed
2 capitulated
3 meticulously
4 assemble
5 simultaneously
6 catastrophes
7 animators
8 pizzazz
9 A
10 A
11 C
12 B
13 C
14 deposed
15 unknowing
16 loyalty
17 hounded
18 deface
19 contribute
20 displaced
21 gainful
22 giveaway
23 ponder, consider
24 spectacular, striking
25 ordinary, usual
26 experts, authorities
27 visible, discernible
28 events, happenings
29 individual, separate
30 interpretation, explanation
31 surprising, startling
32 attempts, endeavors
33 source, origin

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 C
2 B
3 A
4 C
5 B
6 C
7 B
8 C
9 A
10 C

LEARN ABOUT WORDS

1 frustrating
2 available
3 devising
4 conform
5 nervous
6 curiously
7 reputedly
8 revealed
9 C
10 B
11 C
12 A
13 A
14 made of
15 make
16 made of
17 make
18 make
19 made of
20 make
21 made of
22 make
23 hare
24 wave
25 beet
26 waive
27 beat
28 hair
29 in the light of
30 see the light
31 shed light on
32 bring to light
33 light up

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 C
3 B
4 C
5 A
6 A
7 B
8 C
9 B
10 C

LEARN ABOUT WORDS

1 surveillance
2 inexplicably
3 adamantly
4 tranquil
5 wreathed
6 repugnant
7 onerous
8 reverberated
9 A
10 B
11 B
12 C
13 A
14 verbose
15 poetical
16 backward
17 economical
18 bellicose
19 homeward
20 inimical
21 eastward
22 forward
23 peek
24 rode
25 road
26 rowed
27 peak
28 pique
29 in the round
30 round off
31 roundabout
32 round up
33 go the rounds

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 C
2 C
3 true
4 false
5 false
6 true
7 false
8 false
9 B
10 C

LEARN ABOUT WORDS

1 tantalizing
2 inevitably
3 capriciously
4 myriad
5 precision
6 compulsion
7 incredible
8 baffle
9 C
10 C
11 B
12 B
13 A
14 plain
15 flex
16 err
17 arch
18 fine
19 science
20 secret
21 sect
22 take
23 journeys
24 marvelous
25 endless
26 destruction
27 begin
28 constantly
29 reasonable
30 system
31 many
32 grandeur
33 understanding

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 B
3 A
4 B
5 A
6 B
7 B
8 A
9 B
10 C

LEARN ABOUT WORDS

1 Bedouin
2 oasis
3 junction
4 lavish
5 shrewd
6 absolute
7 homage
8 distinguished
9 C
10 A
11 B
12 C
13 B
14 handmade
15 dependent
16 lively
17 matchless
18 adventure
19 temperamental
20 conductor
21 confirmed
22 potholder
23 junction, crossroads
24 virtually, practically
25 located, placed
26 uprising, revolt
27 consent, permission
28 shrewd, clever
29 threatening, menacing
30 announced, proclaimed
31 domination, mastery
32 valiantly, bravely
33 vowed, swore

HOW WELL DID YOU READ?

1 B
2 A
3 C
4 B
5 C
6 B
7 C
8 A
9 C
10 C

LEARN ABOUT WORDS

1 adequate
2 harry
3 dissection
4 pedestrian
5 caches
6 congregate
7 constant
8 immobile
9 B
10 B
11 C
12 A
13 C
14 anteroom
15 postdate
16 antedate
17 antecedent
18 posterity
19 antepenultimate
20 antebellum
21 postpone
22 postgraduate
23 N
24 A
25 A
26 A
27 A
28 N
29 A
30 N
31 A
32 N
33 N

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 C
2 B
3 B
4 A
5 A
6 B
7 A
8 C
9 C
10 B

LEARN ABOUT WORDS

1 unobtrusively
2 ascertaining
3 extrovert
4 stethoscope
5 enthralled
6 rigors
7 overcompensate
8 embraced
9 ruptured
10 B
11 C
12 C
13 A
14 B
15 interference
16 leadership
17 defiance
18 preference
19 appearance
20 membership
21 compliance
22 utterance
23 kingship
24 conference
25 reliance
26 up in arms
27 up against
28 up on
29 up to
30 up and doing
31 made up
32 put up with
33 up for

HOW WELL DID YOU READ?

1 B
2 B
3 C
4 B
5 B
6 A
7 A
8 C
9 A
10 A

LEARN ABOUT WORDS

1 barque
2 perceiving
3 venture
4 succession
5 provisions
6 proportionally
7 consternation
8 motive
9 confounded
10 A
11 B
12 B
13 C
14 A
15 biweekly
16 bicycle
17 semiannual
18 semicircle
19 bisect
20 semidaily
21 semiweekly
22 bipartisan
23 semilunar
24 climbed
25 inattentive
26 shifting
27 repelled
28 following
29 unclear
30 hid
31 refused
32 reveal
33 knowing

HOW WELL DID YOU READ?

1 C
2 B
3 C
4 A
5 B
6 B
7 A
8 B
9 B
10 C

LEARN ABOUT WORDS

1 bizarre
2 terrain
3 obstruction
4 rapidity
5 engulf
6 fiasco
7 visualized
8 precipices
9 coexistence
10 C
11 A
12 B
13 A
14 A
15 solarium
16 observatory
17 aquarium
18 auditorium
19 library
20 laboratory
21 penitentiary
22 conservatory
23 granary
24 planetarium
25 open-and-shut
26 open letter
27 open air
28 open up
29 open to
30 open mind
31 open season
32 open house
33 open-door

HOW WELL DID YOU READ?

1 A
2 A
3 B
4 C
5 B
6 C
7 A
8 C
9 B
10 B

LEARN ABOUT WORDS

1 frustrate
2 scrutinized
3 distinctive
4 stealthily
5 emanating
6 incessant
7 abominable
8 congealed
9 eulogizing
10 C
11 A
12 C
13 A
14 B
15 spectacles
16 postscript
17 describe
18 prospect
19 spectator
20 circumscribe
21 retrospect
22 spectacle
23 manuscript
24 occupation
25 toil
26 drudgery
27 exertion
28 business
29 inspect
30 glance
31 contemplate
32 watch
33 stare

HOW WELL DID YOU READ?

1 A
2 C
3 C
4 C
5 A
6 C
7 B
8 B
9 B
10 B

LEARN ABOUT WORDS

1 apprehend
2 squalid
3 hovels
4 magistrate
5 apprentice
6 molestation
7 petty
8 pilfer
9 subsequently
10 A
11 A
12 A
13 B
14 B
15 unilateral
16 monotone
17 unicorn
18 universe
19 unicycle
20 monogram
21 monolog
22 uniform
23 monosyllable
24 easy
25 powerful
26 dishonorable
27 impracticable
28 magnificent
29 avoided
30 spacious
31 inefficient
32 pardoned
33 danger

HOW WELL DID YOU READ?

1 B
2 C
3 Y
4 B
5 B
6 Y
7 Y
8 B
9 L
10 B

LEARN ABOUT WORDS

1 transient
2 gaudy
3 prodigious
4 intruding
5 conspicuous
6 eminence
7 ruthless
8 diffused
9 disconsolate
10 B
11 A
12 B
13 C
14 B
15 realist
16 nationalistic
17 individualist
18 idealistic
19 realism
20 terrorist
21 idealist
22 individualistic
23 nationalist
24 idealism
25 terrorism
26 give off
27 give in
28 give over
29 give up
30 give to understand
31 give and take
32 give out
33 give back

HOW WELL DID YOU READ?

1 A
2 C
3 B
4 B
5 C
6 C
7 A
8 A
9 A
10 B

LEARN ABOUT WORDS

1 indolently
2 apex
3 funerary
4 spire
5 integral
6 dominate
7 gash
8 stipulated
9 apolitical
10 C
11 B
12 C
13 A
14 B
15 capable of being
16 capable of being
17 capable of being
18 causing
19 causing
20 causing
21 capable of being
22 capable of
23 causing
24 capable of being
25 capable of being
26 on and off
27 on time
28 off with
29 on and on
30 off with you
31 and so on
32 off the mark
33 see off

HOW WELL DID YOU READ?

1 B
2 A
3 C
4 A
5 C
6 B
7 C
8 B
9 A
10 C

LEARN ABOUT WORDS

1 precautions
2 bullion
3 perpetual
4 array
5 careening
6 doubletrees
7 measures
8 debris
9 corroded
10 B
11 B
12 C
13 A
14 C
15 monopoly
16 monogamy
17 monotheism
18 polymorphic
19 monomania
20 polytheism
21 monogram
22 monograph
23 polygraph
24 handsome
25 magnificent
26 pretty
27 lovely
28 graceful
29 cloudless
30 apparent
31 transparent
32 distinct
33 plain

HOW WELL DID YOU READ?

1 A
2 B
3 A
4 C
5 B
6 A
7 C
8 B
9 B
10 B

LEARN ABOUT WORDS

1 initial
2 omnipresent
3 flivver
4 resurrection
5 sedate
6 loath
7 indestructible
8 current
9 conspire
10 A
11 A
12 A
13 C
14 B
15 biannual
16 tetrachord
17 triangle
18 tetrarchy
19 pentagon
20 trisect
21 hexagon
22 pentangular
23 bicycle
24 hexarchy
25 A
26 N
27 N
28 A
29 N
30 N
31 A
32 A
33 A

HOW WELL DID YOU READ?

1 C
2 B
3 C
4 B
5 B
6 B
7 C
8 A
9 C
10 B

LEARN ABOUT WORDS

1 foretaste
2 colossi
3 firmament
4 stoical
5 encumbrances
6 vicinity
7 facade
8 rubble
9 hue
10 C
11 A
12 B
13 A
14 B
15 astronautics
16 astrometry
17 astronaut
18 aster
19 asteroid
20 asterisk
21 astrologer
22 astronomy
23 satisfied
24 merry
25 ecstatic
26 joyful
27 cheerful
28 elated
29 grave
30 sorry
31 miserable
32 dejected
33 melancholy

HOW WELL DID YOU READ?

1 B
2 C
3 C
4 B
5 A
6 C
7 B
8 C
9 B
10 B

LEARN ABOUT WORDS

1 inquisitive
2 apparatus
3 anesthetize
4 plugging
5 catapulted
6 threshold
7 muster
8 inhalation
9 copious
10 C
11 A
12 A
13 B
14 B
15 contain
16 defer
17 conserve
18 retain
19 detain
20 reserve
21 confer
22 deserve
23 refer
24 dazed
25 pushed
26 try
27 question
28 compelled
29 remaining
30 only
31 expended
32 raise
33 summon

HOW WELL DID YOU READ?

1 B
2 A
3 C
4 A
5 C
6 A
7 B
8 B
9 A
10 C

LEARN ABOUT WORDS

1 nonplussed
2 placidly
3 composure
4 finesse
5 vagrant
6 insatiable
7 illumined
8 negligible
9 semblance
10 A
11 B
12 B
13 C
14 C
15 state of
16 amount of
17 amount of
18 state of
19 state of
20 amount of
21 state of
22 amount of
23 state of
24 amount of
25 S
26 S
27 M
28 M
29 S
30 S
31 M
32 S
33 M

HOW WELL DID YOU READ?

1 B
2 B
3 A
4 C
5 B
6 C
7 B
8 C
9 C
10 C

LEARN ABOUT WORDS

1 commensurate with
2 mechanism
3 personified
4 veneered
5 endeavor
6 scrutiny
7 adept
8 indiscriminate
9 opulent
10 C
11 B
12 A
13 A
14 C
15 prefix
16 provide
17 prejudice
18 progress
19 prefabricate
20 prepaid
21 proclaim
22 propose
23 over one's head
24 head and shoulders above
25 make head or tail of
26 turn one's head
27 keep one's head
28 take it into one's head
29 hold one's head high
30 keep one's head above water
31 out of one's head
32 hang one's head
33 by a head

HOW WELL DID YOU READ?

1 A
2 C
3 B
4 C
5 C
6 C
7 C
8 C
9 B
10 C

LEARN ABOUT WORDS

1 concept
2 malady
3 remnants
4 ransacked
5 array
6 travesties
7 stalemate
8 trivialities
9 conserve
10 C
11 A
12 A
13 B
14 B
15 oppress
16 object
17 offend
18 occur
19 obtrusive
20 obtain
21 oppose
22 omit
23 occupation
24 obscure
25 make much of
26 make-believe
27 make a meal of
28 make or break
29 make off with
30 make out
31 make do
32 make up
33 make for

HOW WELL DID YOU READ?

1 A
2 C
3 A
4 A
5 B
6 C
7 A
8 C
9 B
10 B

LEARN ABOUT WORDS

1 unconventional
2 imperious
3 elicited
4 accolades
5 luminary
6 unrelenting
7 permutations
8 undulating
9 preeminent
10 A
11 B
12 A
13 B
14 C
15 live
16 roll
17 disease
18 hear
19 hand
20 twist
21 hang
22 loosen
23 N
24 S
25 S
26 A
27 S
28 A
29 N
30 A
31 S
32 S
33 S

HOW WELL DID YOU READ?

1 C
2 B
3 A
4 B
5 A
6 C
7 C
8 A
9 C
10 B

LEARN ABOUT WORDS

1 pate
2 parse
3 frustration
4 simulated
5 tutelage
6 despotism
7 camaraderie
8 lenience
9 dotage
10 A
11 C
12 B
13 C
14 A
15 eye
16 empty
17 common
18 white; glowing
19 wheel
20 cut
21 drive
22 God; deity
23 S
24 A
25 N
26 S
27 S
28 S
29 A
30 N
31 S
32 S
33 A

HOW WELL DID YOU READ?

1 C
2 A
3 A
4 B
5 A
6 C
7 C
8 C
9 A
10 A

LEARN ABOUT WORDS

1 jauntily
2 gratifying
3 flourishes
4 rendezvous
5 ire
6 vituperative
7 proponents
8 retribution
9 abated
10 A
11 A
12 B
13 B
14 C
15 origin
16 hear
17 hand
18 flesh
19 self
20 God
21 twist
22 hang
23 head
24 dejectedly
25 presented
26 well-behaved
27 private
28 truly
29 strange
30 respect
31 doubt
32 slightly
33 vicious

HOW WELL DID YOU READ?

1 B
2 C
3 A
4 B
5 C
6 B
7 A
8 B
9 A
10 C

LEARN ABOUT WORDS

1 eminent
2 emblazoned
3 perceptible
4 cantankerous
5 ingenue
6 bias
7 exploits
8 skewed
9 pernicious
10 A
11 C
12 B
13 A
14 B
15 between
16 together
17 between
18 between
19 together
20 between
21 between
22 between
23 take after
24 take amiss
25 take back
26 take down
27 take for
28 take in
29 take it lying down
30 take off
31 take on
32 take one's time
33 take over

HOW WELL DID YOU READ?

1 C
2 A
3 B
4 A
5 B
6 A
7 B
8 C
9 B
10 C

LEARN ABOUT WORDS

1 remnant
2 interminable
3 adhered
4 impassive
5 rustic
6 confronted
7 perplexed
8 bantering
9 faltered
10 C
11 B
12 A
13 A
14 B
15 turn
16 bend
17 life
18 horse
19 kind; race
20 hear
21 self; I
22 hang
23 N
24 S
25 A
26 S
27 S
28 A
29 A
30 A
31 A
32 A
33 S

HOW WELL DID YOU READ?

1 C
2 B
3 A
4 C
5 A
6 A
7 B
8 A
9 B
10 C

LEARN ABOUT WORDS

1 demeanor
2 mundane
3 stature
4 blatant
5 rancor
6 paramedic
7 aerospace
8 trajectory
9 foray
10 A
11 C
12 A
13 A
14 B
15 attractive
16 proportionate
17 oppressive
18 creative
19 palmate
20 impulsive
21 collegiate
22 fortunate
23 N
24 P
25 N
26 P
27 P
28 N
29 N
30 P
31 N
32 P
33 N

HOW WELL DID YOU READ?

1 C
2 B
3 B
4 C
5 C
6 A
7 B
8 B
9 B
10 C

LEARN ABOUT WORDS

1 spiritualist
2 apathy
3 denunciations
4 ascertain
5 commuted
6 depreciating
7 conjecture
8 amenities
9 unencumbered
10 C
11 A
12 C
13 A
14 C
15 apart
16 apart
17 apart
18 apart
19 opposite of
20 opposite of
21 apart
22 opposite of
23 by heart
24 set one's heart on
25 to one's heart's content
26 change of heart
27 break one's heart
28 have a heart
29 heart in mouth
30 with half a heart
31 eat one's heart out
32 near one's heart
33 from the heart

HOW WELL DID YOU READ?

1 A
2 B
3 A
4 A
5 C
6 B
7 A
8 B
9 B
10 C

LEARN ABOUT WORDS

1 avid
2 jocular
3 intriguing
4 trumpeted
5 sagacity
6 ambled
7 skittish
8 resplendent
9 debut
10 C
11 B
12 A
13 B
14 A
15 democracy
16 matriarchy
17 monarchy
18 patriarchy
19 aristocracy
20 autocracy
21 anarchy
22 bureaucracy
23 P
24 N
25 N
26 N
27 P
28 N
29 P
30 P
31 P
32 P
33 P

HOW WELL DID YOU READ?

1 B
2 D
3 A
4 B
5 C
6 C
7 A
8 D
9 B
10 C

LEARN ABOUT WORDS

1 pragmatic
2 deteriorating
3 inequities
4 verifiable
5 constituents
6 incumbent
7 canvassed
8 arduous
9 inquisitors
10 concession
11 B
12 A
13 C
14 C
15 A
16 parasol
17 heliolatry
18 heliograph
19 heliotherapy
20 solar
21 perihelion
22 solarium
23 heliocentric
24 solarize
25 undependable
26 quit
27 inadequate
28 uncommon
29 sought
30 defective
31 vague
32 whole
33 forbidden

HOW WELL DID YOU READ?

1 B
2 B
3 D
4 D
5 B
6 B
7 C
8 A
9 B
10 B

LEARN ABOUT WORDS

1 clambered
2 typifies
3 presage
4 victimized
5 bizarre
6 urchin
7 effigies
8 generate
9 pitted
10 aspect
11 C
12 C
13 A
14 B
15 B
16 panacea
17 polychrome
18 pandemic
19 polygamy
20 polyglot
21 pantheon
22 polytheism
23 panorama
24 pandemonium
25 good and
26 no good
27 to the good
28 good for
29 good deal
30 come to no good
31 good-hearted
32 make good
33 for good and all

HOW WELL DID YOU READ?

1 D
2 A
3 A
4 B
5 A
6 B
7 B
8 A
9 C
10 A

LEARN ABOUT WORDS

1 potentialities
2 stultifying
3 endowment
4 infinitesimal
5 significant
6 virtually
7 parallel
8 distinguished
9 suave
10 diffident
11 A
12 C
13 C
14 C
15 B
16 hyperbole
17 hypogeal
18 hyperborean
19 hypercritical
20 hypocritical
21 hypertonic
22 hypotonic
23 hypodermic
24 hypersensitive
25 by word of mouth
26 at a word
27 have a word with
28 have no words
29 have words with
30 in a word
31 man of his word
32 of few words
33 word for word

HOW WELL DID YOU READ?

1 B
2 C
3 A
4 B
5 D
6 B
7 B
8 B
9 C
10 D

LEARN ABOUT WORDS

1 appalling
2 denizens
3 extraterrestrial
4 diversity
5 kaleidoscopically
6 frigid
7 pungent
8 radical
9 speculations
10 endeavor
11 A
12 B
13 A
14 C
15 B
16 stelliform
17 lunacy
18 nebulous
19 stellar
20 lunarian
21 lunette
22 lunisolar
23 lunatic
24 lunar
25 dubious
26 concentrated
27 ignore
28 basic
29 multiple
30 familiar
31 lowered
32 genuine
33 boredom

HOW WELL DID YOU READ?

1 C
2 B
3 B
4 D
5 B
6 B
7 B
8 D
9 A
10 B

LEARN ABOUT WORDS

1 paramount
2 axiomatic
3 untrammeled
4 paradoxical
5 antipathy
6 inveterate
7 dilemma
8 suffrage
9 advocated
10 approbation
11 C
12 A
13 C
14 B
15 A
16 photophobia
17 neuritis
18 monomania
19 appendicitis
20 egomania
21 laryngitis
22 nostalgia
23 phobophobia
24 neuralgia
25 claustrophobia
26 A
27 O
28 O
29 A
30 O
31 A
32 O
33 A

HOW WELL DID YOU READ?

1 A
2 A
3 D
4 C
5 B
6 A
7 D
8 A
9 B
10 C

LEARN ABOUT WORDS

1 informants
2 scrutiny
3 influx
4 confiscated
5 premier
6 clientele
7 contraband
8 riffling
9 philosophy
10 disperse
11 A
12 A
13 C
14 B
15 C
16 peripatetic
17 diagonal
18 perigee
19 dialects
20 dialog
21 perimeter
22 diameter
23 period
24 perihelion
25 from time to time
26 ahead of time
27 in no time
28 for the time being
29 one at a time
30 pass the time of day
31 in good time
32 time after time
33 on one's own time

HOW WELL DID YOU READ?

1 B
2 D
3 A
4 B
5 A
6 A
7 A
8 B
9 A
10 C

LEARN ABOUT WORDS

1 glimpse
2 curtail
3 camouflage
4 replenish
5 ascertain
6 conspicuous
7 superficially
8 behooves
9 intriguingly
10 pocked
11 C
12 B
13 B
14 A
15 B
16 quicken
17 petrify
18 enliven
19 shorten
20 deify
21 glorify
22 horrify
23 heighten
24 darken
25 liquefy
26 mixed
27 mixed
28 mixed
29 mixed
30 valid
31 valid
32 mixed
33 mixed

HOW WELL DID YOU READ?

1 B
2 D
3 D
4 B
5 D
6 C
7 lady visitor
8 laborer
9 visitors
10 landlord

LEARN ABOUT WORDS

1 mimicry
2 torso
3 supple
4 repository
5 excluded
6 haphazard
7 ingenuity
8 deference
9 adroitly
10 consistent
11 B
12 B
13 C
14 C
15 C
16 tempo
17 chronological
18 tempest
19 chronometry
20 extemporaneous
21 chronic
22 temporal
23 temporary
24 chronometer
25 disowned
26 imitation
27 inflexible
28 clumsy
29 aspect
30 unexceptional
31 planned
32 relatively
33 infuriated

HOW WELL DID YOU READ?

1 C
2 C
3 B
4 D
5 A
6 B
7 D
8 A
9 B
10 D

LEARN ABOUT WORDS

1 gratification
2 sustenance
3 recidivism
4 hypothesize
5 perturbed
6 metabolism
7 deviation
8 propensity
9 recalcitrant
10 culprit
11 C
12 A
13 B
14 C
15 A
16 thermostat
17 calefaction
18 thermonuclear
19 thermomotor
20 calorific
21 calorimetry
22 thermodynamics
23 thermal
24 scald
25 soothed
26 copies
27 lasting
28 inadequate
29 separated
30 lawful
31 forgiving
32 squalid
33 famous

HOW WELL DID YOU READ?

1 C
2 B
3 A
4 D
5 B
6 A
7 D
8 B
9 B
10 A

LEARN ABOUT WORDS

1 professes
2 motivated
3 yearn
4 craft
5 penniless
6 primary
7 bland
8 diligent
9 native
10 frustration
11 B
12 A
13 C
14 B
15 C
16 profiteer
17 lessee
18 payee
19 auctioneer
20 draftee
21 slayer
22 payer
23 trustee
24 buccaneer
25 referee
26 mixed
27 mixed
28 valid
29 mixed
30 valid
31 mixed
32 valid
33 valid

HOW WELL DID YOU READ?

1 A
2 C
3 D
4 C
5 B
6 B
7 B
8 A
9 D
10 B

LEARN ABOUT WORDS

1 moldered
2 dwindled
3 dissolution
4 blight
5 resiliency
6 comprised
7 pliancy
8 counterpart
9 tumult
10 swirling
11 B
12 A
13 A
14 B
15 C
16 homocentric
17 heterodox
18 heterogeneous
19 heterochromatic
20 homochromatic
21 heteromorphic
22 homogenize
23 homographs
24 homonyms
25 throw oneself into
26 throw over
27 throw away
28 throw in
29 throw oneself upon
30 throw back
31 throw a monkey wrench into
32 throw together
33 throw open

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 C
3 C
4 A
5 D
6 D
7 C
8 D
9 A
10 B

LEARN ABOUT WORDS

1 premiere
2 stratum
3 journeyman
4 commissary
5 pontificated
6 intricately
7 catapulted
8 disgorged
9 gravitated
10 balefully
11 B
12 A
13 C
14 B
15 C
16 syllable
17 synchronize
18 synthetic
19 symposium
20 synagogue
21 symptom
22 symphony
23 systematic
24 synonyms
25 in at the kill
26 beat around the bush
27 turn tail
28 draw a bead on
29 give chase
30 track down
31 shot through with
32 keep track of
33 smoke out

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 A
3 B
4 B
5 A
6 B
7 B
8 D
9 A
10 A

LEARN ABOUT WORDS

1 crucible
2 transmute
3 crucial
4 coherent
5 induced
6 imply
7 fruitless
8 wan
9 tumultuous
10 rancorous
11 C
12 A
13 B
14 A
15 A
16 regency
17 agency
18 dramaturgy
19 necromancy
20 candidacy
21 metallurgy
22 legislature
23 aleuromancy
24 investiture
25 hyperbole
26 hyperbole
27 understatement
28 hyperbole
29 understatement
30 hyperbole
31 hyperbole
32 understatement
33 hyperbole

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 D
2 A
3 A
4 D
5 D
6 D
7 D
8 A
9 B
10 C

LEARN ABOUT WORDS

1 definitive
2 infirmities
3 precursor
4 rudiments
5 intrinsic
6 reprimands
7 hypothesis
8 suffusing
9 enhanced
10 dissipate
11 A
12 C
13 B
14 A
15 B
16 grave
17 alleviate
18 levitate
19 levity
20 gravimetry
21 gravity
22 aggravate
23 S
24 A
25 S
26 S
27 S
28 A
29 S
30 S
31 S
32 A
33 A

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 B
3 A
4 D
5 D
6 A
7 C
8 A
9 C
10 A

LEARN ABOUT WORDS

1 perceptive
2 revolutionary
3 ingenious
4 appreciable
5 irrefutable
6 baffling
7 infinitesimal
8 simultaneously
9 hypothesized
10 prodigious
11 B
12 B
13 A
14 B
15 C
16 adolescent
17 adolescence
18 coalesce
19 luminescence
20 luminescent
21 convalescent
22 convalesce
23 convalescence
24 obsolescent
25 evanescence
26 understatement
27 hyperbole
28 hyperbole
29 hyperbole
30 hyperbole
31 understatement
32 hyperbole
33 hyperbole

HOW WELL DID YOU READ?

1 D
2 B
3 C
4 A
5 D
6 A
7 B
8 A
9 C
10 D

LEARN ABOUT WORDS

1 subconscious
2 garret
3 honed
4 idiosyncratic
5 languorous
6 crucible
7 improvising
8 engenders
9 genesis
10 sonorities
11 B
12 A
13 C
14 C
15 B
16 megaphone
17 megacycle
18 omnipresent
19 multiply
20 megalomania
21 omniscient
22 megaton
23 multimillionaire
24 multitude
25 rule the roost
26 raining pitchforks
27 hoe one's own row
28 hard row to hoe
29 on the fence
30 have all one's eggs in one basket
31 plow a lonely furrow
32 put the cart before the horse
33 come home to roost

HOW WELL DID YOU READ?

1 B
2 B
3 A
4 A
5 D
6 yes
7 no
8 yes
9 no
10 yes

LEARN ABOUT WORDS

1 proximity
2 anthologies
3 aura
4 authenticity
5 betide
6 incontrovertible
7 meridian
8 waxing
9 perpendicular
10 vertically
11 B
12 A
13 B
14 A
15 A
16 pyromancy
17 metallurgy
18 hesitancy
19 halurgy
20 creature
21 chiromancy
22 curacy
23 tenure
24 zymurgy
25 frequency
26 hyperbole
27 understatement
28 hyperbole
29 understatement
30 understatement
31 hyperbole
32 hyperbole
33 hyperbole

HOW WELL DID YOU READ?

1 D
2 B
3 A
4 C
5 A
6 D
7 C
8 B
9 A
10 C

LEARN ABOUT WORDS

1 stanch
2 veritable
3 agrarian
4 implicit
5 affected
6 organic
7 negligible
8 consolidate
9 stultify
10 endeavor
11 A
12 C
13 B
14 B
15 C
16 igneous
17 scintillate
18 pyromania
19 incinerate
20 incendiary
21 incense
22 ignite
23 pyre
24 cinders
25 group
26 assist
27 scatter
28 superficial
29 embellished
30 retain
31 include
32 withstand
33 transitory

HOW WELL DID YOU READ?

1 B
2 B
3 C
4 A
5 C
6 A
7 D
8 B
9 A
10 D

LEARN ABOUT WORDS

1 mentor
2 consummate
3 wary
4 mantled
5 incipient
6 prowess
7 exalted
8 impasse
9 intuitive
10 intact
11 A
12 C
13 A
14 B
15 B
16 aquarium
17 liquidation
18 hydrophobia
19 liquid
20 aqueduct
21 ondometer
22 dehydrated
23 undulation
24 aquatint
25 enjoyment
26 conspicuous
27 mislead
28 likely
29 incompetence
30 pursue
31 demarcation
32 absolute
33 observe

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 B
2 A
3 B
4 C
5 D
6 A
7 C
8 A
9 D
10 A

LEARN ABOUT WORDS

1 millennium
2 anomaly
3 propounded
4 cairn
5 indigenous
6 ethnic
7 contemporaneous
8 hinterland
9 verdant
10 enigma
11 B
12 C
13 B
14 C
15 B
16 microscopic
17 magnificent
18 microbe
19 macrocosm
20 macroscopic
21 magnanimous
22 micrometer
23 magnitude
24 macrophysics
25 ride out
26 at sea
27 show one's colors
28 sail into
29 steer clear of
30 fall afoul of
31 get one's sea legs
32 walk the plank
33 sail against the wind

LAB IIIb KEY CARD

HOW WELL DID YOU READ?

1 A
2 C
3 B
4 B
5 D
6 A
7 A
8 B
9 C
10 C

LEARN ABOUT WORDS

1 flamboyant
2 litigious
3 inhibited
4 particular
5 tremulous
6 tawdry
7 inordinately
8 mandatory
9 consensus
10 apocryphal
11 B
12 C
13 B
14 B
15 C
16 thermometer
17 metronome
18 meter
19 barometer
20 geometry
21 metric
22 speedometer
23 kilometer
24 astrometry
25 S
26 A
27 S
28 S
29 A
30 S
31 A
32 S
33 A

HOW WELL DID YOU READ?

1 D
2 A
3 B
4 F
5 F
6 T
7 T
8 C
9 C
10 A

LEARN ABOUT WORDS

1 facade
2 ordains
3 translucent
4 ectoplasm
5 elongates
6 protrusions
7 undifferentiated
8 pseudopodia
9 assimilation
10 warty
11 B
12 C
13 C
14 B
15 A
16 pneumatically
17 ethereal
18 pneumonia
19 aeronautics
20 ether
21 aerate
22 aerophobia
23 aerospace
24 pneumatics
25 S
26 S
27 M
28 S
29 A
30 S
31 A
32 S
33 S